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A Systematic Literature Review of Intergenerational Literacy Studies

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A thesis submitted in partial fulfillment of the requirements for the Master of Arts degree in Education

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Abstract

This study is a systematic literature review of peer-reviewed intergenerational literacy studies published in the past 20 years. A key goal of the study is to address the concern of what knowledge has been reported about intergenerational literacy learning between young children and older people who are in their grandparents' generation. The research questions are: 1) What are the trends of academic research on intergenerational literacy in terms of publication date, country of the research, research site, participants' demographics, and literacy phenomenon? 2) What is the existing knowledge of intergenerational literacy? and 3) Based on the extant literature what are the future research needs related to intergenerational literacy? Adopting the theoretical approaches of literacy as social-material practices, I define, in my study, intergenerational literacy as social-material literacy practices between skipped generations (such as grandparents and grandchildren). Data sources were derived from the database ProQuest® according to a set of screening criteria and inclusion and exclusion criteria. Literature selection was also conducted strategically for the purpose of the study, resulting in 18 articles. The study utilized a method of deductive and inductive thematic analysis to analyze the collected data. Findings of this study indicate the roles that grandparents played in intergenerational literacy learning, knowledge construction and relationship building in intergenerational learning, the social nature of intergenerational literacy, and the links of intergenerational literacy with schools. This study provides researchers with information about the trends, existing knowledge, and future research needs of intergenerational literacy studies. The findings may also help enrich educators' understanding of intergenerational literacy so as to support intergenerational programing in a variety of settings including school.

Keywords

Intergenerational literacy, systematic review, early childhood literacy, learning with grandparents

Summary for Lay Audience

Children learn different knowledge from different people, including their grandparents and other elders who are in the same generation of children's grandparents, such as caregivers. For example, children can practice their literacy, namely, how children use their language(s), when they interact with their grandparents or other older adults. Grandparents hence also are regarded as important others, as opposed to teachers and parents, in young children's meaning making. This systematic literature review focuses on studies concerning children's literacy acquisition with their grandparents or other elders.

By searching and screening articles strategically from the database ProQuest®, I ended up with 18 studies to review. Using those 18 studies as the source of the data of the study, together with a method of inductive and deductive thematic analysis, I synthesized the extracted knowledge and reported the findings according to the following research questions: 1) What are the trends of academic research on intergenerational literacy in terms of publication date, country of the research, research site, participants' demographics, and literacy phenomenon? 2) What is the existing knowledge of intergenerational literacy? and 3) Based on the extant literature what are the future research needs related to intergenerational literacy? This study aims to contribute to understanding of intergenerational literacy in a variety of contexts including school and family. It also offers recommendations to literacy researchers, scholars, and educators about future research needs.

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Chapter 1

1 Introduction

In this Chapter, I firstly introduce the research context of my study, and I then talk about how I navigated my way to three specific research questions. Finally, I present an overview of this study, which sketches out the primary content of each chapter.

1.1 Research context

This thesis is designed to identify the research trends and extant knowledge of young children's intergenerational literacy practice, which in this study, refers to children's literacy practice with their grandparents and other elders. Literacy in the study is conceptualized using UNESCO's (2005) definition of it:

[the] ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts [which] involve a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society. (p. 27)

The definition of literacy above highlights the contexts of literacies uses, the purpose(s) of learners' language uses, and the ways of using languages. Importantly and interestingly, the utilization of a series of verbs in the above definition, such as *identify*, *understand*, *interpret*, *create*, *communicate and compute*, ... *achieve*, ... *develop*, ... *participate*, emphasize children's language in use.

Children learn different knowledge (e.g., how to use languages) with different people of various ages, in different ways. Sociocultural theory holds the view that children acquire literacy through social interactions with more others, such as peers, teachers, parents, grandparents, and so forth (Vygotsky, 1978). Many of these others may be people of different generations. Generation, according to Tolbize (2008), is “an identifiable group that shares birth years, age, location, and significant life events at critical developmental stages” (p. 1). Typically, a generation refers to clusters of people born over a 15 to 20 years span (Pew Research Center, 2015). People in different generations hold distinctive embodied and embedded knowledge, values, attitudes, the view of the world, and so forth. When children interact with people of different ages and generations, they learn different knowledge. For example, young children may acquire a range of literacy knowledge by interacting with their parents in everyday life (e.g., Nutbrown et al., 2017), acquire useful skills (e.g., gardening) from their grandparents’ generation (e.g., Jessel et al., 2011), and equip themselves with other information or skills when they engage in various learning activities with their peers and siblings, such as children’s play (e.g., Gregory et al., 2004).

Myriad early ethnographic studies on young children’s literacy learning have highlighted the value of children’s informal learning in out-of-school contexts (e.g., Heath, 1983; Marsh et al., 2017; Taylor, 1983). Along with the more recent investigations into children’s informal and out-of-classroom learning, conceptualizations of literacy have also extended to a view of more than “alphabetic print [literacy] practices” (Marsh et al., 2017, p. 48). This broadened conception of literacy in turn has reinforced the importance of young children’s informal learning with people beyond schoolteachers and in broader social domains than classrooms and schools. Together,

these understandings of literacy and learning highlight that literacy acquisition is situated and culturally and historically shaped (Barton & Hamilton, 2000; Street, 2006).

Inquiring into intergenerational literacy is a logical extension of the above realizations. Before commencing this study, my curiosity was piqued when I searched the term “intergenerational” and/or “intergenerational literacy” in the ProQuest® database. The results revealed that the majority of studies concerned young children’s literacy practices with their parents rather than grandparents and other older adults. I further searched the keywords such as “children/early literacy” and “grandparents”, the results indicated that not all studies on this topic named or generalized the young children’s literacy practices with the people who are in their grandparents’ generation as intergenerational literacy.

Emerging research on intergenerational literacy between young children and their grandparents has identified pockets of issues. For example, why and how older adults support children’s literacy learning. Yet many still remain unknown. In order to move my inquiry of intergenerational literacy studies further, I wondered what has been found by literacy researchers about young children’s literacy interactions with the people who are in a skipped generation from them, such as their grandparents. Therefore, I conducted a systematic literature review to address this inquiry. A key goal of this study was to derive an understanding of what is known about intergenerational literacy and where research about intergenerational literacy can go in the future.

1.2 Coming to the research questions

Before coming to this study, my own academic and non-academic engagement in early childhood literacy (e.g., taking literacy-related courses in my MA program, participating in informal conversations with course instructor, my supervisor and peers in my program, participating in and observing children's informal learning in my family) gave rise to my interest in young children's literacy practice in family. I thought young children's informal learning could tell many different stories about their literacy acquisition, yet I started to wonder if everyone that may be involved in children's literacies were included in the research. My further involvement on this topic led me to this specific stream—intergenerational literacy, in particular, children's literacy acquisition with their grandparents and other elders.

I designed the study as a systematic literature review of intergenerational literacy. Specifically, this study asks three questions:

- 1) What are the trends of academic research on intergenerational literacy in terms of publication date, country of the research, research site, participants' demographics, and literacy phenomenon?*
- 2) What is the existing knowledge of intergenerational literacy?*
- 3) Based on the extant literature what are the future research needs related to intergenerational literacy?*

These three research questions were interrelated and looked into the various aspects and layers of intergenerational literacy. By looking into the first question, I sought an overall view of the research trend of intergenerational literacy, including the approximate quantity of the

publications, in what countries and what social domains the intergenerational literacy took place and has been researched, what kind of children and elders have been involved in those studies, and what literacy phenomenon has been examined in the past decades. Here, by saying literacy phenomenon, I mean I inquired into questions such as what sorts of literacy-related topics or what aspects of intergenerational literacy were included in those studies. For example, were those studies mainly looking into how the participants generate knowledge, or focused on their intergenerational relationships, and so forth? The second question of my study went deeply and broadly to the essence of extant intergenerational literacy studies, aiming to unpack the children's learning through intergenerational lines from the reviewed papers. Considerations here included what and who were involved in young children's intergenerational literacy and how those contributed to children's learning, what may be special about intergenerational literacy between young children and older adults, and some unexpected and surprising findings. Building on the information that was extracted from the first and second questions, the last question inquired into future research needs of intergenerational literacy studies and aimed to offer recommendations and insights for the future research.

1.3 An overview of the study

My study was structured with five chapters in total, including the sections of Introduction, Theoretical Approaches to Literacy and Intergenerational Literacy, Methodology and Methods, Findings, and Discussion and Implications.

Here in Chapter One, I introduced the research context, purpose of my study, and the research questions of this study.

In Chapter Two I introduce the theoretical approaches to literacy and intergenerational literacy. I epistemologically and ontologically situate myself in literacy as socio-material practice. I then synthesize the existing literature on intergenerational literacy to lay a general background concerning what intergenerational literacy is and why it is important and needed. Further, with the aims of setting a theoretical foundation for the study and guiding my systematic literature review, I illustrate several interrelated theoretical concepts, including ZPD (Zone of Proximal Development), Guided Participation, Syncretic Literacy, and Funds of Knowledge, and in what sense do I incorporate those different theories in this study.

Chapter Three presents the methodology of the study—systematic literature review. I illustrate how and why this methodology is appropriate for my study. I then introduce the specific research methods for this study, which cover the database selection, screening criteria design, and searching strategies. I also present that I employ the method of deductive and inductive thematic analysis to analyze the data. At the end of this Chapter, I address the strategies of enhancing the trustworthiness of my study.

In Chapter Four, I present the findings of this systematic review on 18 reviewed studies of intergenerational literacy. With the aim of responding to the first and the second research questions, I present the findings theme by theme. I firstly illustrate the research trends of those 18 intergenerational literacy studies in terms of the publication date, country of the research, research site, participants' demographics, and literacy phenomenon. I then list seven themes that are deductively derived from the theoretical approaches of my study and inductively developed from the data, with elaboration of the evidence or original data collected from the reviewed studies. Additionally, I attach the thematic data analysis in appendices.

Chapter Five offers a discussion on specific issues raised by the findings in relation to the literature and responds to the third research question my study asks. Reflecting upon the extant knowledge of intergenerational literacy between skipped generations, in this chapter I elucidate understandings of how children acquire and practice literacies through intergenerational lines, how knowledge is constructed in intergenerational learning interactions, and the conceptualization of intergenerational literacy and literacy (or literacies). Based on the discussion and implications, I offer a couple of research needs for future intergenerational literacy studies. Lastly, I present the significance of my study.

Chapter 2

2 Theoretical Approaches to Literacy and Intergenerational Literacy

In this chapter, I present the theoretical approaches to literacy and intergenerational literacy, which I also employ to show my own epistemological and ontological positioning. Specifically, I firstly address conceptualizations of literacy as a socio-material practice. I then conceptualize intergenerational literacy. Further, I illustrate several concepts relevant to young children's literacy and intergenerational literacy learning, including Zone of Proximal Development (ZPD), guided participation, syncretic literacy, and funds of knowledge. Those concepts also help me analyze the data.

2.1 Literacy as social practice

Literacy has been diversely conceptualized. This study grows from the seminal work of the New London Group (NLG) (1996). The NLG refutes the notion that literacy is solely a cognitive process involving decontextualized technical skills; instead, the NLG emphasises a broader view of literacy to respond to the growing diverse communication channels among people and the increasing cultural and linguistic diversity (Cope & Kalantzis, 2000; 2009; New London Group, 1996), which further leads to a reconceptualization of literacy as multimodal and socially situated. From a multimodal perspective, children understand their world “in the many different modes and media which make up and communication ensemble” (Stein, 2008, p. 1). Members of the NLG also suggest that literacy should be re-examined under the consideration of “follow[ing]

the social, cultural, institutional, and historical organizations of people (whatever you call them) first and then see how literacy is taken up and used in these organizations, along with action, interaction, values, and tools and technologies” (Gee, 2015, p. 36).

Contemporary literacy studies define literacy broadly as “involving more than just the reading and writing of linear printed-based texts as they recognize that all communication entails more than one mode at a time” (Heydon, 2013, p. 22). The literature expresses that people use different literacies in different domains; according to Barton and Hamilton (2000), domains are “structured, patterned contexts within which literacy is used and learned” (p.11). Literacy is hence understood as socially and culturally situated (Barton & Hamilton, 2000), and it is not literacy singular, rather, it is literacies (Gee, 2015).

A theory of literacy as social practices was put forward by Street (1984). He also termed it as “ideological” model of literacy which indicates that literacy is not simply a neutral skill but “embedded in socially constructed epistemological principles” (Street, 2006, p. 2). The core element of this theory is the notion of literacy practices (Barton & Hamilton, 2000). Literature expresses that practices not only refer to how people use written language in their daily lives (Edwards, 2012), but also involve “values, attitudes, feelings and social relationships” (Street, 1993, p. 12) of people who do with literacy. Therefore, practices are understood in literature as both visible activities (Barton & Hamilton, 2000) and invisible “social and interpersonal relationship and emotions/affect” (Heydon & Du, 2019, p. 220). Simply, it examines how people use literacy in their lives, rather than decontextualized technical skills only.

To understand literacy practice, the notion of literacy event has also been discussed in literature. Some scholars who situated in literacy as social practices (e.g., Barton & Hamilton, 2000; Street,

2006) differentiated literacy events and literacy practices in their works. Heath (1983) identified literacy event as any occasion “in which a piece of writing is integral to the nature of participants’ interactions and their interpretative processes” (p. 196). As scholars’ perspectives of literacy switched to “ideological” model (Street, 1984, p. 1), literacy practice was employed by Street (1984) as a way of highlighting “the social practices and conceptions of reading and writing” (p. 1). It is recognized as culturally constructed and historically situated as it is dynamic and changing (Barton & Hamilton, 2000). Literacy practice refers to “the broader cultural conception regarding particular ways of thinking about and doing reading and writing in cultural contexts” (Street, 2006, p. 5). While Heath defined literacy events as “[The] occasions in which the talk revolves around a piece of writing have been termed literacy events (p. 386)”. Perry (2012) synthesized and illustrated the literacy events and literacy practices in his work based on the work of Barton and Hamilton. She clarified that literacy events are observable which means “we can see what people are doing with texts” (p. 54).) Literacy practice “attempts to handle the events and the patterns of activity around literacy events but to link them to something broader of a cultural and social kind” (Street, 2006, p. 5). Since literacy is also understood as multimodal and has been considered from a new materialism perspective which I will illustrate below, literacy events should no longer be regarded as print only, instead, literacy events should be read posthumanly as well (Jokinen & Murrin, 2020).

2.2 A material turn of literacy

Recently, conceptualizations of literacy have been questioned from a posthumanism perspective. Different from the early literature on young children’s social interactions that posited a focus on the human, in recent years, researchers working in early childhood literacy have turned their

attention to how non-humans or more than humans may be implicated in literacies (e.g., Kuby & Crawford, 2018). This thinking constitutes a “material turn” in literacy (e.g., Kuby et al., 2015; Kuby & Rowsell, 2017). Who and what are included in literacies and their study are extended further by “including the material as an active agent in the construction of discourse and reality” (Dahlberg & Moss, 2010, p. vx). Kuby and Crawford (2018) argued that although some human-centric theories (i.e., sociocultural theory) discuss materiality, their foci are still on “what humans do with each other” (p. 21); they call instead to consider what de-centering humans in the study of literacy might produce.

New materialists emphasize “matter matters” (Kuby et al., 2015, p. 399), including how humans and matter intra-act. New materialist scholarship in literacy adopted the notion of *intra-action*, instead of interaction (which refers to the social interactions of people), to represent “the inseparability of ‘objects’ and ‘agencies of observation’” (Barad, 2001, p.83), as well as that humans and non-humans are entangled in meaning making (Kuby & Rowsell, 2017). In other words, new materialist approaches to literacy focus on the “togetherness” or “inbetweenness” (p. 22) of humans, nonhumans, and more-than-humans (Kuby & Crawford, 2018). And in this way, literacy is regarded as unbounded (Kuby & Crawford, 2018; Leander & Boldt, 2013), which means literacy is not only about what human are doing with each other, but also that human and materials are inseparable in terms of people’s meaning making. Therefore, the “material turn” offers a new perspective for researchers and educators, especially those who situated their understanding of literacy in the social, to rethink the *social(s)* of literacy (Kuby & Rowsell, 2017) and (re)conceptualize literacy.

2.3 Intergenerational literacy

The term intergenerational has been defined as “pertaining to or for individuals in different generations or age categories” (Random House Unabridged Dictionary, 1997), or “being or occurring between generations” (American Heritage Dictionary 2000). Literature defines intergenerational literacy as literacy practice between young children and other adults, such as children’s parents, grandparents, and caregivers. Scholars such as Gregory et al. (2004), Heydon (2007, 2013), and Jessel et al. (2011) have inquired specifically into children’s literacy learning with seniors, such as grandparents and other elders. In my study, I narrowed intergenerational down to skipped generations. Here, skipped generation is framed as “persons separated by at least one generation, such as grandparents and grandchildren” (Heydon, 2019, p. 66). That is, explicitly, I define intergenerational literacy in my study as literacy phenomenon occurring between young children and their grandparents or other elders who belong to the children’s grandparents’ generation.

2.3.1 Nascence of intergenerational literacy research

The literature pertaining to family literacy indicates that educators and schools once placed family members, particularly parents, in an auxiliary role in children’s literacy learning (Auerbach, 1989) given that literacy was once seen as cognitive skills that children gained in formal learning environments at mainstream schools. Schools encouraged or required parents to help children do “school-liked” (p.165) literacy practices at home (Auerbach, 1989), which implied that from the school’s view, home was seen as another space that functioned the same as school in children’s literacy acquisition.

However, partly given the early ethnographic studies of literacy (e.g., Heath, 1983; Taylor, 1983), children's informal literacy learning with family members began to garner much emphasis and was considered essential to the development of young children's literacies (Razfar & Gutiérrez, 2013). Since then, researchers moved their focuses to important others (e.g., grandparents or siblings) and later, to other "literacy constituents" (Heydon & Du, 2019, p, 219).

The role that family members, especially parents, played in children's literacy learning has been examined for decades. A great number of studies highlighted the important role of family in children's learning and claimed that children's engagement in literacy was highly enhanced by family practices (Baker et al., 1997; Nutbrown et al., 2017). Also, studies on family literacy have extended to different national contexts and population groups (e.g., immigrants; ethnical minority groups), and thus gives rise to a range of studies which focus on children of diverse backgrounds (e.g., Reyes et al., 2016; Song, 2016), on literacy practices with other family members other than parents, such as siblings, grandparents and caregivers (e.g., Gregory et al., 2004), and on community environment (e.g., Barton & Hamilton, 1998).

Scholars (e.g., Gregory et al., 2004; 2008; Heydon, 2007; 2013; 2019; Jessel et al., 2004; 2011) who worked on literacy and interested in intergenerational literacy started investigating children's learning and interaction with their grandparents and caregivers as families were increasingly recognized as significant in children's literacy learning. Plus, due to several other influential factors which I will talk about in the following section, young children's intergenerational literacy practices in skipped generations were studied by those scholars working in early childhood language and literacy.

2.3.2 Need of intergenerational literacy

Literature shows that long-lasting exploration on family literacy and early childhood literacy throughout the last few decades highlighted the significant roles of adults beyond parents in children's learning (e.g., Jessel et al., 2011). For instance, Rogoff (1990) highlighted the role other adults played in children's literacy learning in informal contexts and questioned the most important role of parents as mediators of literacy for young children. Gregory (2008) also argued that scholars and educators neglected the important role that grandparents played in young children's learning and claimed that grandparents should be seen as linguistic assistants as well as mediators of literacies. Additionally, Heydon (2013) explicitly claimed that elders should be regarded as resources given that generally older adults are "becoming more educated (La Porte, 2000), healthier (Thompson & Wilson, 2001)" (p. 21), and regarded as carrying valuable knowledge to share with others (Illinois Intergenerational Initiative, 1997). Hence it is known in the literature that older adults can assist children with their meaning making, while their roles were once largely ignored (Gregory et al., 2004).

Literature also collected evidence from demographic statistics, which indicates that opportunities for literacy engagements between grandparents and grandchildren are related to trends such as economic and immigration trends. For instance, The United States Census reports reveal that over 7 million grandparents live with their own grandchildren under 18 years old, and around 2.5 million out of those take responsibility of their grandchildren (U.S. Census, 2018). Also, "the older population is projected to double by 2030 (to 71.5 million) and represent 20 percent of the total U.S. population" (Minnesota Department of Health, 2019, n.p.). Both of the above can extend the intergenerational learning opportunities for seniors and children. In Canada, according

to updated Canada immigration office statistics, Canada admitted 82,470 permanent residents in the Family Class in 2017, and 85,179 in the year 2018 (Minister of Immigration, Refugees and Citizenship, 2018; Minister of Immigration, Refugees and Citizenship, 2020). Out of these, 20,494 in 2017, and 18,026 in 2018 were admitted in the parents and grandparent category, which implies that more intergenerational relationships will be built within and across immigration families. Outside North America, the literature reports pockets of high opportunities for similar types of relationships; for instance, in Singapore seven out of eight households have grandparents living with their grandchildren (Statistics Singapore, 2010). Therefore, the increasing establishment of skipped generation relationships can provide potential opportunities for researchers to work on intergenerational literacy.

Studies on intergenerational literacy have been conducted also within non-familial relationships. The literature includes examinations of young children and other elders who do not have biological relationships with children. For instance, some intergenerational learning programs were set up to provide learning opportunities between non-biological skipped generations, that is, The U.S. Foster Grandparents Program of 1963 (Larkin & Newman, 1997). Studies in this category have found that frequent contact between young children and with older adults who are not family members is related to more positive attitudes about aging in general (Jarrott, 2007).

Literature also indicates that formal, non-familial intergenerational learning programs can be beneficial to both children and older adults (Heydon, 2013). Children can get a sense of lifelong learning (Brummel, 1989), and understand the older adults better as a whole (Penn State College of Agricultural Sciences, 2003). The older adults, especially elders at risk, can have positive affective benefits when they interact with children (Ward et al., 1996). Overall, the literature concludes that intergenerational programs can equip different generations with an

intergenerational understanding and lifelong learning opportunities (Brummel, 1989), offer possibilities to foster intergenerational relationships (Heydon et al., 2008; Jarrott & Bruno, 2007), and expand learners' literacy options (Heydon, 2013). Literacy options, according to Heydon and O'Neil (2016), refer to “fulsome opportunities for communicating through myriad modes, ..., and [people choose] the most apt mode for the occasion of the communication” (p.3).

2.4 The Zone of Proximal Development (ZPD)

The literature contains plenty of studies on early childhood learning and the Zone of Proximal Development (ZPD). Studies that index ZPD concede that children's learning and thinking is “social and historical in origin” (Gregory et al., 2004, p.7). ZPD is a concept that is part of Vygotsky's (1978) sociocultural theory. It is defined as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (p. 86). That is to say, “what the child is able to do in collaboration today [they] will be able to do independently tomorrow” (Vygotsky, 1978, p. 211). Bodrova and Leong (2006) further described those two levels of ZPD as children's “Independent Performance” and “Assisted Performance”. Social interactions or assistance happened in the space between “Independent Performance” and “Assisted Performance”. Through the perspective of ZPD, children's practices and knowledge are dynamic and continually changing (Bodrova & Leong, 2006) because of the assistance from experienced others.

The concept of ZPD not only emphasizes adult guidance and/or collaboration with capable peers, but also embraces a broad range of non-human elements in learning. Brown et al. (1993) listed examples of some non-human elements, which include “books, videos, wall displays, scientific

equipment and a computer environment intended to support intentional learning” (p. 191). This extension of ZPD is consistent with what Bodrova and Leong (2006) claimed “the general cultural or social level” (p. 10), which more broadly refers to the societal features such as “language, numerical systems, and the use of technology” (p. 10).

Moll et al. (1992) highlighted that ZPD does not concern children’s learning or educators’ teaching only, but more importantly and broadly, it emphasizes the interdependence between adults and children in their creatively interactive processes. Therefore, I employed this important notion of ZPD to guide my systematic literature review on the studies of intergenerational literacy.

2.5 Guided participation

Studies on intergenerational literacy examined older adults’ assistance to children and children’s active literacy engagement, which is theorized as “guided participation” by Rogoff (1990). Drawing, in part, on Vygotsky’s (1978) sociocultural theory, Rogoff (1990) argued that children develop their understanding of the world and skills with the help of others. This led to her introduction of the concept of *guided participation* which highlights important others’ guided and supportive involvement in children’s learning. Because Rogoff (1990) believed that “guided participation is jointly managed by children and their companions in ways that facilitate children’s growing skills” (p. viii), and children’s mental development happened through “guided participation in social activity with companions who support and stretch children’s understanding of and skill in using the tools of culture” (p. vii). Guided participation emphasizes the mutual engagement of children and other participants in shared learning activities in which children play a central role (Rogoff, 2003) rather than a “top-down view” (p. 923) where the

adults is fully responsible for children's learning (Zimmerman & McClain, 2016). From this perspective, guided participation includes collaboration and shared understanding in learning activities (Rogoff, 1990).

However, scholars also questioned the concept of guided participation. For instance, Kenner et al (2008) argued that although Rogoff's (1990) notion of guided participation includes active involvement of both children as apprentice and caregivers as navigators, the focus is still on the acquisition of knowledge and master of skills from the children's side. Moreover, Kenner and his collaborators' (2008) study on intergenerational learning around computers indicated that in fact there was reciprocal learning between children and their grandparents, so that they concluded that "synergy" that was identified by Gregory (2004) might be a proper concept to illustrate this "reciprocal learning exchange" (p. 316). Despite the questioning on the notion of guided participation, literature on intergenerational literacy practice still identifies that the concept of guided participation posits children in a more active position, which regards children as "a more equal player" (p. 39) in shared meaning making (Jessel et al., 2011). My study was designed to look into the studies of literacy practice between skipped generation and situated in the world view of literacy as a social practice. Therefore, this study concedes "guided participation" and adopts it as one of the theoretical frameworks to conduct the systematic literature review.

2.6 Syncretic literacy

Literature indicates that by exploring young children's learning with others (i.e., siblings, grandparents) in home-related contexts and the learning of children across cultures, researchers have identified children's capacity to "pick and choose from their home, community and school languages and literacies to make sense of texts" (Gregory et al., 2004, p. 3). That is, children can

create their own understanding by drawing upon literacy practice in various domains. This was theorized by Gregory (2004) and other collaborators (Chen, Drury, Kelly, Kenner, Robertson, Williams) as “syncretic” (p. 3) literacy.

Two important notions of syncretic literacy are syncretism and literacy mediators. The former term refers to children’s creative learning and the latter one to the crucial roles of the elders in children’s learning process. In this section, I will elaborate on these two concepts based on current literature.

2.6.1 Syncretism

Syncretism was initially employed by Plutarch, the Greek historian (c. 46-120 AD), and then was historically characterized by the conflicts of different cultures and religions (Gregory et al., 2013), which was defined and used in a more negative way. As it develops, syncretism was redefined in different ways, and hence gradually, according to Volk (2013), moved its focus from “officially recognized culture units” (Rosaldo, 1993, p. 29) to “the mundane practices of everyday life” (Rosaldo, 1993, p. 217).

In the field of early childhood language and literacy practice, many scholars discussed the terms of syncretism and syncretic literacy (Gregory et al., 2004; Gregory et al., 2013; Volk, 2013). Duranti and Ochs (1997) once described syncretism as “hybrid cultural constructions of speech acts and speech activities that constitute literacy” (p. 173). Gregory et al. (2004) defined syncretism as “creative process in which people reinvent culture as they draw on diverse resources, both familiar and new [focusing] on the activity of transformation” (p. 4). It thus

refers to “active creation of new practices” (p. 311) and/or as “a creative act of mind” (p. 312), which is more than blending of different practices (Gregory et al., 2013).

Duranti and Ochs (1997) introduced syncretic literacy and defined it as “an intermingling or merging of culturally diverse traditions [that] informs and organizes literacy activities” (p. 2).

However, drawing on the work of Duranti and Ochs (1997), Gregory et al., (2004) argued that those definitions in the literature are not clear, and held to an extended perspective on syncretic literacy in their *Syncretic Literacy Studies*. *Syncretic Literacy Studies*, according to Gregory et al.

go beyond issues of method, materials, and parental involvement towards a wider interpretation of literacy, including what children take culturally and linguistically from their families and communities (prolepsis), how they gain access to the existing funds of knowledge in their communities through finely tuned scaffolding by mediators and how they transform existing languages, literacies, and practices to create new forms (syncretism). (p. 5)

Therefore, socially and culturally situated, syncretic literacy in Gregory et al. (2004) and Gregory et al. (2013) refers to the creative forms of meaning making such as when children mix familiar practices with new practices by drawing upon various cultural styles, languages, literacies in different contexts or during interaction with various mediators, and then transform what they have acquired. From this perspective, children are creators, and their learning are creative works. That is, by using the new and familiar resources, children actively participate in various literacy practices and generate transformative works.

2.6.2 Literacy Mediators

Through a lens of syncretism, the work of Syncretic Literacy Studies not only highlighted the “agency and expertise of young children” (Volk, 2013, p. 237), but also identified literacy mediators (Gregory et al., 2004). Significant literacy mediators include grandparents, parents, siblings, peers, and teachers (Gregory et al., 2004), who play supportive roles and the imperceptible influence in children’s meaning making (Curd-Christiansen, 2013).

Literature on children’s learning across intergenerational lines has shown that children can construct their knowledge and develop their language and literacy skills by participating in activities that involve their grandparents (e.g., Curdt-Christiansen, 2013; Gregory et al., 2004; Jessel et al., 2011), and hence scholars emphasize the important impact that older generations as literacy mediators exert on children’s lives in diverse contexts. For instance, Curdt-Christiansen’s (2013) study on the literacy practice of an ethnic Chinese family in Singapore and a Chinese immigrant family in Montreal highlighted the role of grandparents as mediators, which she defined as “imperceptible influences” (p. 1).

Importantly, literacy mediators do not refer to humans only. According to Jessel et al (2011), what literacy participants bring in their learning also include “a range of material resources” (p. 48) and those resources can be used as mediating artefacts (Crook, 2001). Thus, it is known in literature that literacy mediators also include materials.

2.7 Funds of knowledge

Literature reveals that studies on children’s literacy learning also includes foci on out-of-school contexts and children’s informal learning. Anthropological literature using ethnographic

techniques (e.g., Moll et al., 1992), for instance, documented that children can generate problem-solving strategies and lived knowledge from their own families. Therefore, Moll and González critiqued the assumption that children enter school without any knowledge; instead, they argued that children enter school with knowledge they acquire from their families and interactions with others outside of school, which they termed as “funds of knowledge” (González et al. 2005a; Moll et al. 1992).

According to Moll et al., (1992), funds of knowledge are “the essential cultural practices and bodies of knowledge and information that houses use to survive, to get ahead, or to thrive” (p. 21). Examples of children’s funds of knowledge could be “economics, such as budgeting, accounting, and loans; repair, such as household appliances, fences, and cars; and arts, such as music, painting, and sculpture” (Hedges et al., 2011, p, 189). Therefore, in a simple sense, funds of knowledge indicate the knowledge and skills that children acquire culturally and socially through their interactions with families, for instance, in the course of everyday household activities. González et al. (2005b) also indicated a variety of household activities that involved children and others in the family. Those activities include:

car repair, gardening, home improvement, child-care, or working in a family business or hobby. ... [W]e asked about music practices, sports, shopping with coupons, and other aspects of a child’s life, which helped us develop a competent and multidimensional image of the range of possible funds of knowledge. (p. 18)

Additionally, the term of funds of knowledge was further described by Riojas-Cortez (2001) in his study as cultural elements that also include families’ “language, values and beliefs, traditions, household care, and the value of education” (p. 37).

Scholars (e.g., Moll, 2000; Riojas-Cortez, 2001) in the areas of language and literacy emphasized the significance of funds of knowledge in pedagogy. Literature shows that in early childhood education, teachers are encouraged to use a funds-of-knowledge approach to help young children with their learning and mental development, especially for children of culturally and linguistically diverse backgrounds. Riojas-Cortez (2001) claimed that funds of knowledge inform educators “what children know and are capable of doing” (p. 39) and teachers should use children’s funds of knowledge to assist children to develop their language and literacy learning. From a funds-of-knowledge perspective, the elders as funds of knowledge carriers pass it on to young children who are recipients and future carriers. My study examines the literacy engagement between the older and the young. Therefore, the concept of funds of knowledge is employed to guide my investigation in my study.

2.8 Summary

In this chapter, I illustrated the theoretical approaches to literacy and intergenerational literacy. I situated myself in the conceptualization of literacy as socially, culturally, and historically situated and how literature defines intergenerational literacy. And drawing upon this, I defined intergenerational literacy as social practices between skipped generations within or across families in my study. I further reviewed the pertaining primer literature on children’s meaning making through intergenerational lines, which could set a context for my systematic literature review. It included how researchers navigated their ways to work on intergenerational learning and why intergenerational literacy studies were significant and needed. Plus, I adopted several interrelated theories and concepts that form a theoretical basis for my study as well as help me

with my data analysis. Specifically, those theories and concepts are Vygotsky's notion of Zone of Proximal Development (Vygotsky, 1978), Rogoff's notion of guided participation (Rogoff, 1990), Gregory and her colleague's theory of syncretic literacy (Gregory et al., 2004), and Moll and her colleague's notion of funds of knowledge (Moll et al, 1992).

Chapter 3

3 Methodology and Methods

This thesis was designed to illuminate the existing literature on intergenerational literacy involving young children and the elders. Foci are trends of intergenerational literacy studies, knowledge that has been generated in the area, and future research recommendations for researchers in this stream. In this chapter, I explicate the methodology of my study, followed by a description of my research method. I then discuss the rationale of the database selection, and I also introduce the selected database – ProQuest®. Afterwards, I present the screening criteria for the literature and my searching strategies. I also share the methods of coding I employ to analyze the selected literature. As the closure of this chapter, I offer a discussion about trustworthiness of my study.

3.1 Methodology

I adopted a methodology of systematic literature review to conduct my study. Research synthesisists obtain their evidence from the previous primary and secondary studies in an area (Cohen et al., 2018). In the 21st century, education research calls for evidenced-based studies, hence systematic reviews are increasingly employed by education scholars to offer evidence to inform policy makers and planners by synthesizing various studies (Gough et al., 2012). According to Cooper (1998), literature reviews intend to “integrate what others have done and said”, to “critique previous scholarly works, to build bridges between related topic area, to identify the central issues in a field, or all these” (p. 3). Gough et al., (2012) also claimed that

unlike forms of literature reviews that are conducted without “clear and accountable methods” (p. 3), “systematic reviews are undertaken according to explicit methods” (p. 3).

To respond to my research questions, my literature review involves both conceptual synthesis and interpretive synthesis. Specifically, in conducting the review I position myself within the conceptualization of literacy as social-material practice. Ontologically, I also subscribed to the view that “the world is socially constructed in terms of the meanings we attribute to events” (Cohen et al., 2018, p. 434). Cohen et al., stated that interpretive synthesists unpack the “multiple perspectives of different stakeholders with a sensitive understanding” by involving themselves in “iterative negotiations between multiple meanings constructed at each layer of interpretation and representation” (p. 434). My systematic review aimed to have an overall understanding and extended scope on research concerning intergenerational literacy. Conceptual and interpretive synthesis can help this study achieve this goal.

3.2 Methods

Drawing on Gough, Thomas and Oliver’s (2012) notion of “systematic maps” (p. 5), I illustrate the systematic map of this study as connected to its three research questions in the following subsection. Gough et al., (2012) concluded that systematic maps have three main purposes: “(i) [to describe] the nature of a research field; (ii) to inform the conduct of a synthesis; and (iii) to interpret the findings of a synthesis” (p. 5).

My study was designed for synthesizing the studies in young children’s intergenerational literacy practice with their grandparents and other elders. Therefore, the following content includes my

selection of appropriate databases, screening criteria, inclusion and exclusion criteria, and my strategies for literature searching.

3.2.1 Database selection

My research focus is at heart about educational phenomena, therefore, databases for education were the targets for my study. Also, in order to make my study manageable, databases for education that were accessible via my research institute ---- Western Libraries were put into the pool of selection.

I found there were 11 recommended and available databases for Education in total in my research institute. A list of those databases is offered below.

- CBCA Education
- Dissertations & Theses
- Education database
- Education Index Retrospective
- ERIC
- JSTOR
- Physical Education Index
- Physical Education Index (Current and Previous Year)
- Project MUSE
- PsycINFO (ProQuest)
- Ulrich's Periodical Directory

Seven (CBCA Education, dissertations & Theses, Education database, ERIC, Physical Education Index, Physical Education Index (Current and Previous Year) and PsycINFO) of these databases are included on the platform of database ProQuest®. Thus, due to the manageability of the study as well as the consideration of reducing possible duplication on literature across databases, ProQuest® was selected as the database for this study. I will explain the additional reasons for choosing ProQuest® by adding a brief introduction of it below.

ProQuest®, as a database, includes various types of contents and information, such as “the world’s largest collection of dissertations and theses”, around half a million E-books, newspapers of a time span of 3 centuries, and “rich aggregated collections of the world’s most important scholarly journals and periodicals” (ProQuest®, n.d.). From the branch of education, users can access a large amount of top educational publications and hundreds of educational topics at a variety of levels in ProQuest® Education Journals (ProQuest®, n.d.). In addition, researchers can work out precise searching results as ProQuest® has its renowned abstracting and indexing ability to “structure data for simple access and discovery” for all kinds of data seekers (ProQuest®, n.d.). Therefore, ProQuest® Educational Journal Database is a proper database for my study, since its vast capacity of educational publications and precision search could meet the needs of my systematic review on literature of intergenerational literacy learning, and it can also potentially strengthen the trustworthiness of my findings.

3.2.2 Screening criteria

For the purpose of both, again, making this review feasible and responding to all research questions, I designed my study as a conceptual and interpretive synthesis. Thus, in terms of literature selection, I searched and collected the literature purposefully for this study. I firstly

conducted initial literature searching in the database ProQuest® by employing the key searching terms (those terms will be discussed and provided in the section of searching strategies) and following screening criteria. I then ran the second round of literature screening according to the inclusion and exclusion criteria. I developed the following screening criteria,

- (1) peer-reviewed scholarly journals that were published from 2000 to 2020.
- (2) studies that are searchable and accessible in the database ProQuest® Education Journals. And
- (3) Literature that is selected by using a “thesaurus term” (Shaw et al., 2004, p. 2), namely, intergenerational literacy, and a set of closely related “free-text terms” (Shaw et al., 2004, p. 2) which I will discuss in the section of Searching strategies.

I also developed a series of inclusion and exclusion criteria in order to have a clear scope as well as focus of my systematic review. According to Suri (2019), clear inclusion and exclusion criteria define the scope and minimize the biases of the synthesis study. Those inclusion and exclusion criteria are:

- Literature that refers to all races, ethical groups, and cultural groups will be included.
- Literature that evolves participants group of both (a) young children and their grandparents and (b) young children and other elders will be included.
- Excluding studies or research that discuss young children’s literacy with others, for example, children’s literacy learning with their parents or siblings.
- All studies conducted in global contexts will be included.
- Only literature that is published in English will be included.

- Both conceptual research papers and empirical studies will be included. Because (a) my systematic review is designed as both conceptual and interpretive synthesis, and (b) the issues this study aims to address involve researching trends, existent knowledge and future research needs of intergenerational literacy.
- literature that uses qualitative methods will be included. Since such studies are featured as data-rich or rich-descriptive, which can offer a window for me to address issues in my study.

All these screening, inclusion, and exclusion criteria helped me with the screening process of literature and finally resulted in all reviewed papers for my study (See Appendix B for a list of all reviewed papers).

3.2.3 Searching Strategies

Cohen et al. (2018) held the view that “synthesists must search strategically for the relevant evidence to meet the synthesis purpose efficiently within the available resources and pragmatic constraints” (p. 436). Drawing on this view, I conducted the searching of literature strategically for my reviewing study.

I conducted the whole searching and screening process by three steps. I firstly developed a set of searching terms that related to the scope of my study, namely, young children’s intergenerational literacy learning with their grandparents or other elders. I then used each term to retrieve the relevant literature from the database ProQuest® separately by following the three screening criteria. Finally, drawing on a set of inclusion and exclusion criteria, I selected the reviewed studies that were suitable for my study.

To begin with, I developed the controlled term group “intergenerational literacy & children” which helped me locate all resources targeted indexed in abstracts, subjects, content or anywhere within papers (Zhang et al., 2019) pertaining to children’s intergenerational literacy learning. According to the initial pilot searching and my own trial work on intergenerational literacy studies, I found that not all previous relevant research phrased literacy practices between children and their grandparents-generation as “intergenerational literacy”. Therefore, only searching the term “intergenerational literacy” in the database might miss a plenty of relevant literature in this field. I therefore worked out three additional complementary groups of term to retrieve the pertaining literature. They are (1) “literacy & grandparents”; (2) “learning & grandparents”; and (3) “literacy & elders”.

I then used these four searching terms to search, separately, the literature in the database ProQuest®. A total number of 214 peer-reviewed journal articles from 2000 to 2020 were found by using all searching terms before inclusion and exclusion screening process. Those 214 studies encompass articles of using the term “intergenerational literacy & children” (n=48), “literacy & grandparents” (n=23), “learning & grandparents” (n=86), and “literacy & elders” (n=57). (Also see details in Table 1)

Finally, by hand-selecting all papers, which is scanning the abstract of each paper and the full text when there was not enough information in abstract, through the inclusion and exclusion criteria, I ended up with 18 studies as the reviewed studies of my study. (See details of all reviewed studies in Appendix B)

Table 1. *The Searching Results of Using Each Term & Total*

Key searching terms	Searching results	Total number
Intergenerational literacy & children	48	214
literacy & grandparents	23	
Learning & grandparents	86	
literacy & elders	57	

3.3 Literature Analysis

In this section, I share the methods that I used to analyze the data, namely, all reviewed documents I selected for my study. I also illustrate how I analyze those documents. In general, to respond the three research questions (as follows) of my study,

- 1) What are the trends of academic research on intergenerational literacy in terms of publication date, country of the research, research site, participants' demographics, and literacy phenomenon?*
- 2) What is the existing knowledge of intergenerational literacy?*
- 3) Based on extant literature what are the future research needs related to intergenerational literacy?*

I adopted inductive and deductive thematic analysis to code all reviewed literature. Thematic analysis is “an independent qualitative descriptive approach” (Vaismoradi et al., 2013, p. 400), and it is mainly defined as “a method for identifying, analysing and reporting patterns (themes) within data” (Braun & Clarke, 2006, p. 79). Boyatzis (1998) also stated that thematic analysis is

“a process that can be used with most, if not all, qualitative methods” (p. 4). Explicitly, I deductively derived codes and themes from the literature with respond to research questions. Code, according to Miles et al. (2014), is “most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data” (p. 3). Specifically, I derived four themes from the theoretical approaches that I illustrated in Chapter Two: 1) roles of elders, 2) relationship building, 3) knowledge construction, and 4) the impact of intergenerational learning. Because those were identified as important aspects in the primer literature of intergenerational literacy and young children’s learning. I also inductively identified codes and themes that emerged from the selected studies. I used a table that inserted in a Microsoft Word file to organize and analyze the data. I then adapted the table with detailed inductive and deductive thematic analysis as Appendix in this thesis (See Appendix A for details of the deductive and inductive thematic analysis).

In terms of specific coding methods, I employed different coding approaches to code documents, for instance, I used holistic coding for a large amount of data. According to Miles et al. (2014), unlike micro analysis or line-by-line coding, holistic coding signifies that researcher “applies a single code to a large unit of data in the corpus” in order to grasp a sense of overall content and the possible categories that may develop (p. 10).

Since my collected data are digital documents and often manifested as rich-descriptive and long paragraphs, I firstly assigned a study ID to each study for the purpose of organizing and coding literature. I then coded the documents within each study itself. Meanwhile, I organized all data, codes, and themes in separate charts or tables for the further analysis or conclusion. For example, Table 2 shows the analysis of each study in terms of my first research question, which I further used to summarize the trends of studies on early childhood intergenerational literacy.

Table 2. Document Analysis for the First Research Question

Study ID	Published date	Country of the research	Research site	Participants' demographics			Literacy phenomenon
				cultural & linguistic backgrounds	Gender	SES (socio-economic status)	
1	2017	Canada	An early childhood classroom	Indigenous people	Unknown	N/A	"how the funds of knowledge were actualized or leveraged in an early childhood classroom"
2	2009	Canada	School	N/A	Unknown	N/A	Community-school literacy initiative: seniors visit schools to read with children
3	2001	U.S.	Seniors' centre	N/A	Unknown	N/A	Intergenerational service-learning project. Children learn how to care for other through intergenerational lines
4	2014	Israel	Schools	Ethnically diverse	Mixed	Low-Middle & Lower class	Through digital literacy practice in a literacy program, Examining participants' generational status
5	2004	UK	Home	Cross-cultural	Mixed	N/A	intergenerational literacy learning in a multimedia age. What count as literacy?
6	2007	UK	Home	Cross-cultural	Mixed	N/A	Interlingual and intercultural exchanges between grandparents and young children
7	2010	UK	Home	Cross-cultural	Female	N/A	"The learning taking place in the homes of third-generation migrants to the UK"

(To be continued)

Study ID	Published date	Country of the research	Research site	Participants' demographics			Literacy phenomenon
				cultural & linguistic backgrounds	Gender	SES (socio-economic status)	
8	2008	U.S.	<i>Learning Center Hospital-like setting</i>	N/A	<i>Mixed</i>	N/A	<i>How to facilitate intergenerational learning program?</i>
9	2018	Canada	<i>An elder's home</i>	N/A	<i>Unknown</i>	N/A	<i>"examined the affordances of singing as a multimodal literacy practice within ensembles that featured art, singing and digital media produced in an intergenerational programme"</i>
10	2007	Australia	<i>Home-related</i>	N/A	<i>Mixed</i>	N/A	<i>"identifies the significant roles played by older generations"</i>
11	2004	UK	<i>Home-related</i>	<i>Cross-cultural</i>	<i>Female</i>	N/A	<i>Intergenerational learning at home context.</i>
12	2011	UK	<i>Home-related</i>	<i>Cross-cultural</i>	<i>Mixed</i>	N/A	<i>"... investigates informal learning, literacy and language development occurring in the home through exchanges between children ... and their grandparents"</i>
13	2002	U.S.	<i>Seniors' centre</i>	N/A	<i>Mixed</i>	N/A	<i>Intergenerational relationship and benefits from an "ongoing oral history and writing project"</i>

(To be continued)

Study ID	Published date	Country of the research	Research site	Participants' demographics			Literacy phenomenon
				cultural & linguistic backgrounds	Gender	SES (socio-economic status)	
14	2007	UK	Home	Cross-cultural	Mixed	N/A	<i>Learning between children and their grandparents</i>
15	2017	UK	Home	Cross-cultural	Female	N/A	<i>"focuses on the attitudes towards reading in the home, handed down through the generations and experienced by the young children in four families of Pakistani and Indian origin."</i>
16	2000	Unknown	Unknown	N/A	Unknown	N/A	<i>"the power of grandparent involvement" (p.111)</i>
17	2008	UK	School	Cross-cultural	Unknown	N/A	<i>"The role played by grandparents in family support and learning" (p. 126)</i>
18	2019	U.S.	Home-related contexts	African American	Female Af-Am grandmothers	N/A	<i>"how African American grandmothers caring for their grandchildren promoted literacy for themselves and for the children in their care." (p. 429)</i>

Note. N/A in the table represents that the paper did not provide the specific or explicit information of this category.

3.4 Trustworthiness

In this section, I illustrate the multiple strategies that were adopted to strengthen the trustworthiness of my study.

First of all, I held that the reliability of the selected database and credibility of data in my selected literature formed the base for my study's trustworthiness. As mentioned in the section of database selection, ProQuest® Educational Journal encompasses a vast number of top educational papers, diverse educational topics, and precise searching results, which make it as a reliable database. In addition, most studies (n=15) that I reviewed in my study were empirical studies involving rich-descriptive first-hand data that were collected by researchers from participants' real-life experience and real-time literacy practices. The reliability of both database and reviewed literature ensured the trustworthiness of this comprehensive study of literature review.

Purposeful sampling also enhanced the credibility of this study. As illustrated at the outset of this chapter, I purposefully selected reviewed studies for responding all three research questions. According to Teddlie and Yu (2007), via purposeful sampling, researchers can focus on "specific purposes associated with answering a research's questions" (p. 77). Therefore, from a methodological perspective, purposeful selection of literature assured the authenticity of my study as well.

Furthermore, this systematic literature review also considered the agreement on findings between the researcher and co-workers, namely, me, and my supervisor and committee member, who supervised and supported the whole researching process of my MA thesis. For example, I refined

my findings based on their feedbacks and comments. And we further had discussion when there was confusion, until reaching an agreement. As Cohen et al. (2018) stated, “different collaborators have the potential to enrich the synthesis by bringing in their own particular expertise” (p. 436). My supervisor and the committee member of my MA thesis are also experienced researchers in the field of literacy studies. By supporting and guiding my study, we reached agreements on all questions that my study asked so that it helped my systematic literature review to be epistemologically “dialogical and naturalistic” (Timulak, 2014, p. 487).

3.5 Summary

In this section I discussed the methodology and methods that I employed for my study. Specifically, I defined my systematic literature review as both conceptual synthesis and interpretive synthesis. Also, to keep the consistency with my research design, I purposefully selected studies from the database ProQuest® according to screening criteria and narrowed all literature down to my study focus by following a set of inclusion and exclusion criteria. I conducted the searching for literature by using several searching strategies, such as using controlled searching term and several complementary terms. I reviewed and analyzed documents by using the methods of inductive and deductive thematic analysis. I also concluded that the reliable database and data, purposefully sampled studies, together with the discussion and agreements of my research collaborators, ensured the trustworthiness of my systematic review on an overall level.

Chapter 4

4 Findings

In this chapter, under the guide of my research questions, I present the findings of my systematic review on selected 18 published journal papers. I firstly report my findings about the trends of reviewed studies with tables and figures. I then present my findings about the existent knowledge on intergenerational literacy learning with four deductively derived themes from the theoretical approaches and three inductively developed themes.

4.1 The trends of intergenerational literacy studies

In this section, I share my study findings of the research trends of the reviewed studies of intergenerational literacy. Specifically, I relate findings concerning publication date, country of the research and research site, participants demographics (including cultural and linguistic background, gender, intergenerational relationship, and socioeconomic status), and literacy phenomenon.

4.1.1 Publication date

Figure 1 shows the number of all reviewed studies, by year, that focused on young children's literacy learning with older adults from 2000 to 2020. I found during this time range, only a few studies of intergenerational literacy learning were published each year, there were no publications pertaining to intergenerational literacy learning found in database ProQuest® in the years of 2003, 2005, 2006, 2012, 2015, 2016 and 2020. In general, I did not observe any obvious increase in terms of the number of publications during the time range I examined.

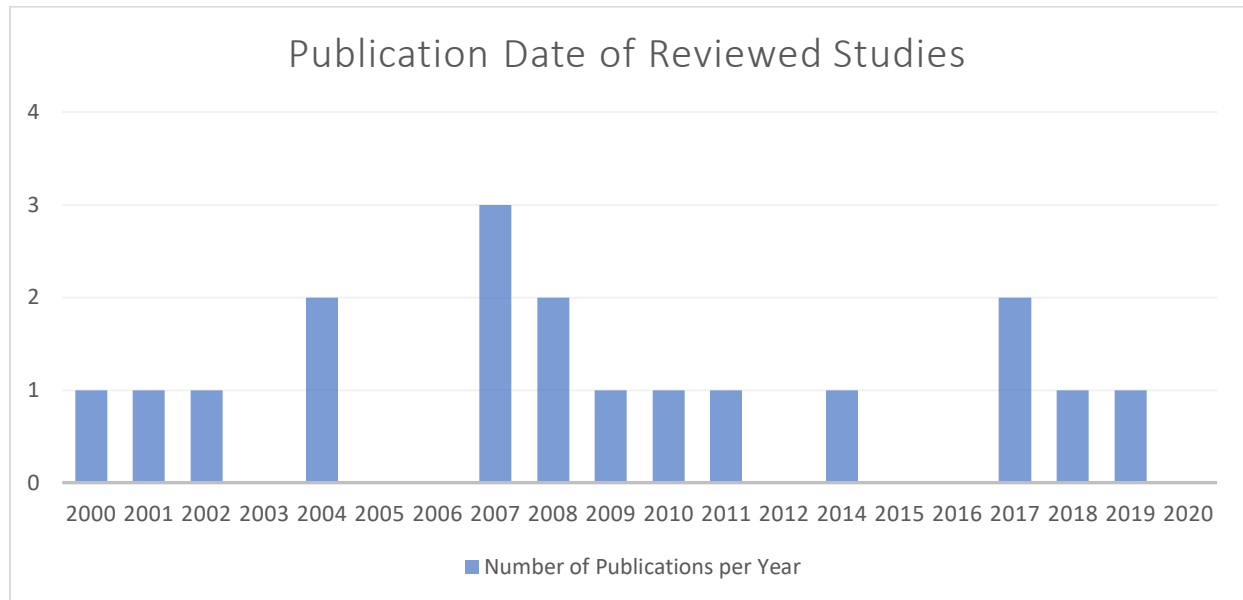


Figure 1. Number of publications from 2000 to 2020

4.1.2 Country of the research and research site

My study found there was a relatively diverse countries where the intergenerational interactions took place and the research was conducted. 18 reviewed studies covered five countries: United Kingdom, United States, Canada, Australia, and Israel. Figure 2 shows that among all 18 reviewed papers, eight studies were conducted in the United Kingdom which takes up more than 40 percent of all reviewed studies. Then followed by the United States with four studies, and Canada with three. Australia and Israel each have one study published. There is one published study from an unknown country as the paper did not provide this information.

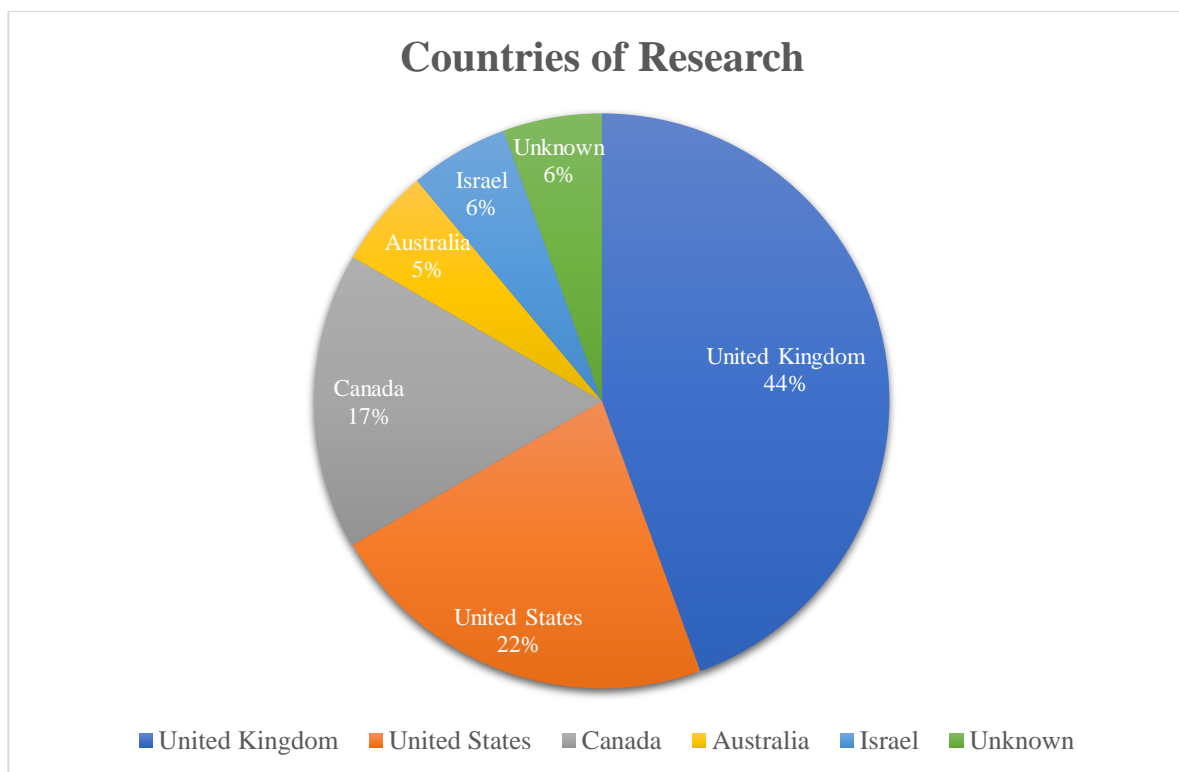


Figure 2. Number and percentage of intergenerational literacy publications in various countries

“Research site” in my study was defined as the social space or context where young children and older adults’ intergenerational literacy learning occur, such as home or classroom. Two main contexts were reported in reviewed research: private (e.g., home-related domains) and public (e.g., school; classroom). I labelled the research site of study #16 as unknown because no specific information about the research site was provided in this conceptual paper. Table 3 shows the detailed research site of each study and which category of context it belongs to.

Table 3. *Research Site of Reviewed Studies*

Study	Research site/ context	Category of context
1	Classroom	public context
2	School	public context
3	seniors' centre	public context
4	school; classroom	public context
5	home-related	private context
6	home-related	private context
7	home-related	private context
8	“hospital-like setting”; public space	public context
9	an elder's home	public context
10	home-related	private context
11	Home	private context
12	home-related	private context
13	seniors' centre	public context
14	home-related	private context
15	home-related	private context
16		Unknown
17	School	public context
18	home-related	private context

4.1.3 Participant demographics

I looked into and presented participants demographics in categories of cultural and linguistic background, gender of older participants, intergenerational relationship between the younger and older participants, and their socioeconomic status (SES).

The reviewed articles represent two categories of participants in terms of their cultural and linguistic backgrounds: 1) participants of cross-cultural and linguistic backgrounds (n=9); and 2) participants of mono- or without specifying their cultural and linguistic backgrounds (n=9). For

category 1), eight out of nine studies involved participants who were immigrants in UK; participants of the remaining study were Jewish and Arab immigrants in Israel.

Reviewed literature indicated that there were a greater number of female adult participants than male ones involved in those 18 reviewed studies. Especially in studies that intergenerational literacy happened in home-related contexts, the participants were always grandmothers. A total of eight papers involved both male and female elders. Six articles, including two conceptual papers, did not clarify the gender of the older participants. Interestingly, there were four publications which participants were female (grandmothers) only, while none of those 18 reviewed studies involved male as the only participants. Thus, in 12 studies which included information about participants' gender, female participants were involved in all those studies and male elders were included in eight studies.

I also discovered that the reviewed intergenerational literacy studies covered two kinds of intergenerational relationships between younger and older participants: 1) biological (n=12) and 2) non-biological (n=6). I found that younger and older participants' intergenerational relationship are correlated to research sites. For most studies that intergenerational learning took place in private contexts (e.g., home), the participants' relationship is biological, namely, they are grandparents and grandchildren. While for other studies which research sites are public contexts, the participants are non-biological groups.

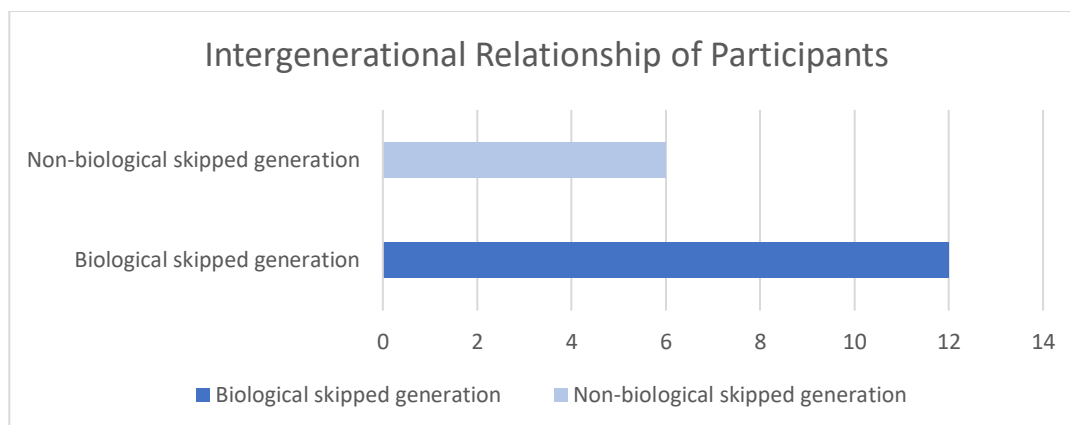


Figure 3. the Intergenerational Relationship of Young and Old Participants

Most reviewed studies did not directly introduce the socioeconomic status (SES) of participants, although my research question intended to examine it. Only one comparative study (study #4) specified the socioeconomic status of participants. However, based on the information about research countries and research settings of each study, I discovered that some studies (n=3) were conducted in rural settings, some (n=2) were in urban contexts; and the rest of the reviewed studies remains unknown.

Children with disabilities were involved in two studies. One experimental study named them as some of research participants, and one conceptual paper briefly discussed disability children's literacy learning with their grandchildren.

Overall, the 18 reviewed papers covered participants of diverse cultural and linguistic backgrounds, both genders, biological and non-biological younger-and-older groups, and of special needs, although the amount is limited.

4.1.4 Literacy phenomenon

Reviewed publications examined various aspects and topics of intergenerational encounters with a focus on young children's literacy, including the roles of elders, intergenerational learning in cross-cultural contexts, and other additional literacy-related constituents about which I elaborate below.

Reviewed studies communicated the important roles that elders played in children's learning (Ken & McCluskey, 2000) and examined how the elders support children through intergenerational lines (Jane & Robbins, 2007; Stephens, 2019). Also, some studies (Doiron & Lees, 2009; Freeman & King, 2001; Heydon et al., 2017; Jane & Robbins, 2007) examined the impacts of intergenerational literacy learning for both younger and older participants. Five papers (Gregory, 2007; Gregory et al., 2010; Jessel et al., 2004; Jessel et al., 2011; Kenner et al., 2007) focused on the intergenerational learning in cross-cultural families, examining what benefits that intergenerational learning brought to children and elders and how intergenerational learning occur.

The reviewed studies also focused on grandparents' perceptions of intergenerational learning (Little, 2017), the young children and elders' generational status in intergenerational learning activities (Gamliel & Hazan, 2014), and intergenerational relationship building (Kazemek et al., 2002). Additionally, reviewed papers also discussed, from a pedagogical view, how to facilitate intergenerational learning program (Heydon & Daly, 2008) and what can schools do when the important roles of grandparents were identified (Mitchell, 2008).

4.2 The existing knowledge of intergenerational literacy

As mentioned in Chapter Three, my study deductively analyzed data and identified four themes from the theoretical approaches of my study and the relevant theories I adopted in my study.

These four themes are: roles of elders, relationship building, knowledge construction, and the impact of intergenerational learning. Conceptualizing literacy as social-material practices and using multiple theoretical concepts such as ZPD, guided participation, syncretic literacy, and funds of knowledge, the literature indicates that intergenerational literacy learning involves social relationships (such as intergenerational relationships between grandchildren and their grandparents), emotions (such as happiness, enjoyment, comfort), how children generate knowledge and what knowledge is constructed, and how children's literacy acquisition will be influenced when they learn with different people and in different settings (such as their grandparents in my case). Also, I understand that human and non-human are entangled together and literacy as unbounded. Therefore, I derived those four literacy-related and interrelated deductive themes from the theoretical approaches in my study.

Further, three additional themes emerged in my inductive thematic data analysis process: literacy outreach, intergenerational literacy in pedagogy, and non-human elements in intergenerational learning, which all closely and explicitly related to literacy conceptualization and children's literacy learning. Below I will report my findings through each identified theme.

4.2.1 Roles of elders

Most of the reviewed studies offered evidence of and hence highlighted the important roles both grandparents and other elders play in intergenerational interactions. In general, the reviewed

studies found that grandparents were regarded as caring and supportive elders for children and learning resources in terms of children's literacy learning.

The Caring and Supportive Elders

The reviewed studies have demonstrated that elders care about and can make supportive contributions to children's life both in literacy and social aspects (Doiron & Lees, 2009; Gregory et al., 2004; Jane & Robbins, 2007; Ken & McCluskey, 2000; Little, 2017; Mitchell, 2008; Stephens, 2019). Little's (2017) study reported that grandparents wanted to help assist their grandchildren's education as they hope the younger generation can live a better life. The "caring and supportive" feature of grandparents is particularly obvious in studies that involving ethnic minority participants. For instance, Stephens's (2019) study on intergenerational interactions of African American grandmothers with their grandchildren reported that grandmothers advocated for their grandchildren in terms of the race issues by connecting and communicating with schools. In Stephens's (2019) case, grandparents show their care and support in a way of paying attention to social justice for their grandchildren in literacy-related education context.

I also discovered that elder's care and support of their grandchildren's meaning making manifested in their encouragement for children. Pockets of studies (Gregory et al., 2004; Jane & Robbins, 2007; Little, 2017) offered ethnographic evidence which shows grandparents encouraged their grandchildren to learn and to explore the world in a variety of ways. And in turn, children were encouraged by grandparents' various forms of support. For example, the study conducted by Jane and Robbins (2007) illustrated that most grandparents listened patiently to their grandchildren's ideas and also encouraged the young children to express their ideas. Similarly, Gregory and colleagues' (2004) work presented a case which shows a child's interest

in technology and popular culture was encouraged because of the videos and computer games that were purchased by grandparents.

All above cases are about elder's support and care for meaning making of non-disabled children. Reviewed literature (Mitchell, 2008) also demonstrated that elders support and care for children who were identified as living with a disability. For instance, drawing upon some literature, Mitchell's (2008) concluded in her conceptual paper that grandparents could provide "emotional support" (p. 128) for children with disabilities.

Importantly, reviewed studies (Mitchell, 2008) found that grandparents are not only supportive and helpful for children, but also for schools as I will detail.

Learning resources

Literature (Anderson et al., 2017; Jessel et al., 2004; Ken & McCluskey, 2000; Kenner et al., 2007; Mitchell, 2008) has recognized elders as valuable learning resources and claimed that grandparents are "an untapped source of knowledge" (Anderson et al., 2017, p.20) or "important resources for the 'funds of knowledge' (Moll et al., 1992, p. 133)". For instance, Ken and McCluskey (2000) stated that grandparents "preserved their ethnic heritage" and "[grandparents can] instill a sense of family history, continuity, and purpose" (p. 112). The role of learning resource is particularly evident among grandparents who are grandparents working across cultures and languages. For example, Jessel and colleagues' (2004) studies involved a group of grandparents and their grandchildren in Sylheti/Bengali-speaking families of Bangladeshi origin in east London, UK, and their study found that the grandmother was regarded by the grandchildren as the "Bengali cultural and linguistic resource" (p.5). Similarly, Kenner and colleagues' (2007) work that examined the participants who held the similar linguistic and

cultural backgrounds with the participants in the study of Jessel et al. (2004), reported that the Bangladeshi grandparents were a key resource for equipping their grandchildren with knowledge of their heritage language and culture.

4.2.2 Relationship building with/through literacy

Intergenerational relationships

Reviewed literature concluded that intergenerational relationships between grandchildren and grandparents were built when elders engaged in young children's formal (e.g., school or classroom learning) and informal literacy learning (e.g., play) (Doiron & Lees, 2009; Freeman & King, 2001; Heydon et al., 2017; Jessel et al., 2004; Jessel et al., 2011; Kazemek et al., 2002; Ken & McCluskey, 2000; Kenner et al., 2007; Mitchell, 200; Stephens, 2019). Heydon and colleagues' (2017) work specified that intergenerational interactions "provided opportunities for participants to form relationships" (p. 128). Grandparents as important and special others contributed to the relationship building. For example, Ken and McCluskey (2000) stated in their paper that elders' caring and supportive gestures made children feel a sense of security. Similarly, Doiron and Lees's (2009) study also found the intergenerational relationship was a comfort to children, and thus children were more willing to speak out their ideas and feelings.

Unlike the children-and-parents relationship, literature has reported that grandchildren-and-grandparents relationships have many special features. Kenner and colleagues' (2007) study reported that the grandparents who participated in their study conveyed that their grandchildren "get a sense of security and comfort" (p. 227) from them when they practice literacy together. Kazemek and colleagues' (2002) study reported that when elder participants participated in

intergenerational literacy program, they found that young children “had things in common” (p. 622) with them. Freeman and King (2001) found that the older participants in their study thought it is joyful to practice literacy with young children, and their intergenerational interactions are meaningful ones. Jessel and colleagues’ (2004; 2011) work highlighted that grandchildren-and-grandparents’ intergenerational relationships are caring, comfortable and friendly. Mitchell (2008) reported that those intergenerational relationships are fun and relaxed; and Ken and McCluskey (2000) held that intergenerational interactions establish an enduring relationship between the elders and young children. Those kinds of intergenerational relationships were built through young children and elders’ intergenerational literacy learning.

School-home/community relationships

I also found in the reviewed literature that a relationship between grandparents and schools was built while grandparents were involved in children’s literacy learning, and older adults can provide useful and purposeful contributions to schools (Doiron & Lees, 2009; Mitchell, 2008; Stephens, 2019). For example, Stephens (2019) found that when grandparents engaged in their grandchildren’s school learning and life, they became familiar with the education processes as well as the policies that might influence their community. These grandparents and schools’ connections further were extended to a relationship of school and home/community. For instance, Doiron and Lees (2009) reported that when grandparent volunteers engaged in children’s literacy learning at school, “an emerging school-community relationship – a web of connection – [was] created” (p. 137). Further, the elders helped to enhance the “school-community bond” (p. 145), extending the “school culture back out into the community” (p. 152). The elders thus created an emerging school-community relationship. Similarly, Mitchell (2008) held that intergenerational learning offered a significant “mechanism to extend school [and]

home links” (p. 130). The relationships between schools and children’s home or community were discussed in examples like these because of the elders’ involvement in their grandchildren’s literacy learning.

4.2.3 Knowledge construction

Findings of reviewed papers indicated that knowledge sharing, exchange, and syncretizing occur in intergenerational interactions between young children and their grandparents and other elders.

Reviewed literature has illustrated that knowledge sharing and exchange happened through intergenerational learning opportunities. Both the young and old generations bring in their own funds of knowledge to their shared learning activities or programs. For example, Heydon and her colleagues’ (2017) study reported that singing, as a literacy practice, provided opportunities for young children and older participants to learn with each other, and both elders and young children contributed the resources they had to form their mutual work. The elders, who were regarded as learning resources in my reviewed literature (Anderson et al., 2017; Jessel et al., 2004; Ken & McCluskey, 2000; Kenner et al., 2007; Mitchell, 2008), passed on their funds of knowledge to young children. Meanwhile, children also shared elders with their knowledge, such as IT skills. Gamliel and Hazan’s (2014) study, Kenner and colleagues’ (2007) study, and Jessel and colleagues’ (2011) case all reported that children shared their literacy knowledge about computers with the older participants. Through this knowledge sharing and exchange, a form of reciprocal literacy learning came into being between these two generations. Much evidence of this sort of two-way learning was provided in studies that focused on cross-cultural participants. For example, Jessel and colleagues’ (2004) study on a multicultural family reported that the grandmother, who spoke both English and Bengali, promoted her grandchild’s Bengali literacy

by sharing Bengali literacy related knowledge; and the grandchild also helped developing her grandmother's computer literacy while they both engaged in a computer-related literacy learning activity.

It was also demonstrated in literature that participants not only shared and exchanged their knowledge, but also co-generate (new) knowledge when they engage in intergenerational literacy practices which encompass not only print literacy but also multimodal literacy. For example, Heydon and colleagues' (2017) work stated that elders and children created meanings as a group while they participated in multimodal literacy practices.

All above cases demonstrated that literacy knowledge was constructed through intergenerational lines and this knowledge construction was a reciprocal literacy learning.

4.2.4 Impact of Intergenerational literacy

Reviewed literature reported that there were a variety of benefits for elders and children when they were involved in intergenerational literacy learning activities.

I discovered from the reviewed studies (Doiron & Lees, 2009; Freeman & King, 2001) that children could not only develop their knowledge, but also gained a sense of enjoyment from intergenerational interactions and thus became more engaged in their literacy learning. For example, Gregory and colleague's (2010) case study reported that young children's knowledge was implicitly developed through close observation in intergenerational learning activities. Similarly, Freeman and King (2001) also stated that the intergenerational literacy project in their study enhanced young learner's "cognitive, social, emotional, and physical development" (p. 215). Further, Doiron and Lees's (2009) work reported that shared reading between elders and

children enhanced children's enjoyment of reading, strengthened their understanding of the value of reading, and practiced their reading skills.

Also, reviewed literature has demonstrated that intergenerational literacy learning expanded children's and elder's literacy options as well as children's identity options. According to Heydon and O'Neil (2016), identity options refer to the "multidimensional nature of identity" (p. 45). Heydon and her colleagues' (2017) study on intergenerational literacy program highlighted that singing as literacy expanded participants' literacy options as children used different modes (other than print literacy) to communicate. Gregory and her colleagues (2004) also found intergenerational learning offer opportunities for children to expand their literacy knowledge. As to children's identities extension, for example, Heydon and Daly (2008) indicated that by engaging in various intergenerational literacy learning activities, opportunities and programs, children could explore their identities as competent learners. Kenner and colleagues' (2007) work discovered that children participated in family activities with their grandparents enabled them to recognize themselves as somebody in a complex kinship network. Gamliel and Hanzan's (2014) comparative study also found that children were confident with their identity as teachers in the intergenerational literacy program they participated in with their teacher's support. Those different identities that were reported in the above reviewed papers tells us that children could explore their various identities when they engaged in intergenerational literacy learning activities.

Reviewed literature revealed that intergenerational interactions also benefit seniors, which in turn enabled seniors to better support and engage in children's literacy learning (Doiron & Lees, 2009; Jane & Robbins, 2007; Ken & McCluskey, 2000; Kenner et al., 2007) and lay foundation for their future intergenerational literacy learning (Doiron & Lees, 2009). Doiron and Lees

(2009) stated that intergenerational literacy interactions helped elders expand their knowledge, gave them a way to know about the education system, and created opportunities for elders to be recognize for the value of their contributions in intergenerational literacy learning. Kenner and colleagues (2007) also specified in their case studies that intergenerational literacy learning “complemented children’s school learning” and “contributed to [grandparents’] lifelong learning” (p. 235). Intergenerational interactions also brought elders enjoyment and emotional wellbeing. For instance, the studies of Doiron and Lees (2009), Jane and Robbins (2007), and Ken and McCluskey (2000) all reported that through intergenerational literacy interactions, elders came to realize that they were valued and needed by their grandchildren. Also, Ken and McCluskey (2000) presented in their study that some grandparents stated intergenerational literacy interactions with young children “make us laugh”, “keep us young”, and “give new meaning to our lives” (p.114).

4.2.5 Literacy outreach

It emerged from reviewed studies that scholars and educators have stretched their understanding of literacy by looking into the various details of intergenerational literacy learning, especially children’s informal learning with grandparents. This understanding enriched the (re)conceptualization of literacy which expanded scholars’ focuses of literacy from traditional view to its social nature.

Five studies (Doiron & Lees, 2009; Heydon & Daly, 2008; Heydon et al., 2017; Jane & Robbins, 2007; Kenner et al., 2007) all specified this literacy outreach. Doiron and Lees (2009) concluded in the study that their understanding of literacy was extended to a wider scope which focused on not “a discrete set of linguistic skills” (p. 148), but the social contexts where literacy practices

occur. Similarly, Heydon and Daly (2008) also highlighted in their paper that intergenerational literacy activities reflected the “social nature of learning” (p. 83). Jane and Robbins (2007) reported the “cultural-historical nature” (p.13) of children’s mental development. Importantly, Kenner and colleagues (2007) claimed in their studies that their findings “extend theories of sociocultural learning” (p. 239).

4.2.6 Intergenerational Literacy in Pedagogy

Reviewed literature also discussed intergenerational learning in pedagogy based on what research has discovered about intergenerational learning and the implementation of intergenerational literacy programs (Doiron & Lees, 2009; Jane & Robbins, 2007; Kenner et al., 2017; Stephens, 2019). By implementing intergenerational learning programs, scholars in my reviewed papers discussed and offered suggestions for schools and teachers. Kenner and colleagues (2017) held that schools should be aware of the special quality of skipped intergenerational relationships. Stephens (2019) also suggested that schools should recognize the roles of elders in learning. Schools also are expected to involve elders in children’s formal learning in classrooms or schools, such as what Doiron and Lees’s (2009) study suggested: “build in mechanisms for teacher-volunteer communication” or make the seniors “feel part of the school culture” (p. 149). Jane and Robbins (2007) also argued that teachers are the important ones who can assist children with linking knowledge inside and outside of school together. Therefore, in general, scholars in above reviewed studies called for the education system’s awareness and attention to build connections between children’s informal and formal learning, to link the school with home, and to involve the important others in children’s learning.

4.2.7 Non-humans in intergenerational literacy

I also discovered that some reviewed literature mentioned non-humans involved in intergenerational literacy learning. Those non-human and more-than-human entities included places or spaces, modes, materials, and time.

As for other places or spaces, Little's (2017) study examined the role of the library in grandparents and their grandchildren's learning and reported that the library was recognized by the participants as a "regular part of their lives", yet it was also regarded by some families as "a rule-regulated space of quiet and contemplation" (p. 434). The library was conceptualized in the study as a resource for participants to use in Little's (2017) case as it said that "... women (grandmothers) ... [assisted] their children, and more likely to utilize available resources, such as the library." (p. 435). Jessel et al. (2011), they stated in their study that a special space or spaces were formed within where intergenerational interactions took place and the spaces also included "a range of material resources" (p.48) that the participants brought into.

Literature also examined how modes work in intergenerational literacy learning activities. Three papers (Jessel et al., 2004; Jessel et al., 2011; Kenner et al., 2007), for instance, discussed how the mode of touch was importantly implicated in intergenerational communication. Specifically, these three studies reported that participants used touch in intergenerational encounters to construct learning events, to confirm their intergenerational relationships, and to guide, encourage, and motivate children. Jessel et al.'s (2011) study also mentioned how gesture interacted with gaze in intergenerational communications.

Computers were also mentioned as important in intergenerational literacies; for instance, Jessel and colleagues' (2011) found that computers played a participatory role in intergenerational literacy learning as it "[set] the rhythm of events and [evoke] 'talkback' to the screen" (p. 48). Kenner and colleagues' (2007) study also regarded the computer as a third participant in intergenerational literacy learning.

Another non-human element that has been discussed in reviewed literature was time. Three papers (e.g., Jane & Robbins, 2007; Jessel et al., 2004; Jessel et al., 2011) reported the relevance of the time that grandparents and grandchildren spend together as a mediator of relationship. The time here is highlighted because, as Jessel et al., (2004) stated, it enables grandparents to offer "continued and extended support" (p. 8) for their grandchildren, which in turn helped them forge caring and relaxed intergenerational relationship.

4.3 Summary

In this chapter, I presented findings responding to my first and second research question.

Through systematic review and thematic analysis on selected 18 papers, my study examined the research trends of those studies and the existent knowledge on intergenerational literacy.

Regarding the research trends of those studies over the past 20 years, my research found: (1) consistency in the low quantity of studies being published in the area;; (2) research covered various, though limited countries, and both home and school or school-like contexts were included; (3) research included participants of diverse backgrounds; and (4) the studies mainly focused on investigating how intergenerational literacy learning between skipped generations took place in various contexts, with diverse participants.

In terms of the existent knowledge of intergenerational learning, findings of my research included: (1) grandparents were widely acknowledged as significant supporters in children's informal and formal literacy learning; (2) a special intergenerational relationship was built through intergenerational interactions; (3) new knowledge was generated through intergenerational literacy learning; (4) both young children and older adults benefited from intergenerational literacy learning; (5) knowing better about intergenerational literacy enriched scholars' conceptualization of literacy and (6) evoked the attention of education system; and (7) non-human or beyond-human entities were mentioned in some studies, without addressing the materials' active engagement in intergenerational learning though.

Chapter 5

5 Discussion and Implications

In this chapter, I discuss the findings of Chapter Four pertinent to the research questions of this study. To recap, this study asks:

1) What are the trends of academic research on intergenerational literacy in terms of publication date, country of the research, research site, participants' demographics, and literacy phenomenon?

2) What is the existing knowledge of intergenerational literacy?

3) Based on the extant literature what are the future research needs related to intergenerational literacy?

Relative to the first two questions, I discuss the findings related to 1) the affordance of grandparents and other elders in intergenerational literacy; 2) Generational status and knowledge construction in intergenerational literacy; 3) Intergenerational literacy and schools; 4) non-humans and more-than-humans in intergenerational literacy; 5) the situated nature of intergenerational literacy; and 6) The diversity of research contexts and participants. Along with my discussion, I also talk about the future research needs that I identified while I discuss the findings. This also respond to the third research question that my study asked. To close, I present the significance of this study.

5.1 The affordance of grandparents and other elders in intergenerational literacy

Findings of Chapter Four recognized that grandparents and other elders played a variety of roles in intergenerational literacy: they were caring and supportive participants and were also learning resources. Compared to the literature I offered in Chapter Two, which recognized elders and other adult participants (e.g., parents) as literacy mediators (Gregory et al., 2004; Jessel et al., 2011), my findings reported that reviewed studies identified the specific roles that grandparents and other elders played in intergenerational literacy learning. For example, some grandparents supported their grandchildren by sharing their patience and attention, by providing learning materials which required a capital investment, by encouraging children, and by bringing in and sharing their resources of knowledge. The roles that grandparents and other elders played in intergenerational literacy learning also related to, for example, their linguistic, cultural, ethnical and socio-economic backgrounds. Some studies highlighted the unique role of grandparents of ethnic minority families who needed to attend to social justice that were implicated in the processes of their children's literacy learning. Grandparents in linguistic minority families were also seen as needed cultural and linguistic resources for mother tongue acquisition and maintenance. This indicates that, in different cases and aspects, the roles that grandparents and other elders played were various and were situational in nature, meaning that the roles were informed by context.

The above highlights how Elders' contributions in/through intergenerational literacy vary and are informed by participants' funds of knowledge. This knowledge is embedded and embodied and connected to culture and language—of the participants and the context. As such, future research

on intergenerational literacy might delve more deeply into questions of linguistic, cultural and ethnic minority situations, allowing for more knowledge generation pertaining to what grandparents and other elders (including those of linguistically, culturally and ethnically diverse backgrounds) can contribute to intergenerational literacy and the diversity roles elders play in children's literacy acquisition.

5.2 Generational status and knowledge construction in intergenerational literacy

Young children co-generated knowledge with elders through intergenerational lines in the reviewed studies. Connecting this piece of finding with other findings in my study and Rogoff's (1990) guided participation as I illustrated in Chapter Two, I reckon that this sort of two-way learning and knowledge co-generation between children and elders could occur given that 1) both generations actively participated in and shared their resources in intergenerational literacy, 2) intergenerational relationships, by in large, were characterized as nurturing and a safe environment in which to share; and 3) the elders supported children in a variety of ways. This reciprocal relationship challenges the idea of children as being necessarily subordinate to adults. That is, children were seen in the studies as "a more equal player" (Jessel et al., 2011, p. 39). The implication here concerns the generational status in intergenerational literacy. The term "generational status" (Gamliel & Hanzan's, 2014, p. 886) indicates the social positions of children and elders in intergenerational learning. The generational status in the reviewed studies shows grandparents and other elders as assistants, relationship creators, as well as learners. The generational status of children in the reviewed studies can be seen as diversely apprentice and

sometimes teachers as well. In this sense, the generational status of young children and older adults in intergenerational learning encounters is not fixed, it is changing and dynamic.

Notably, the generational status of younger and older participants might be different in different contexts and in the population of diverse cultural, linguistic, and ethnic backgrounds. For example, in my reviewed studies, Gamliel and Hanzan's (2014) comparative study reported that in Arab participants who live in Israel, children of Arab origin were told by teachers that they should performed in an adult-oriented way while they participated in the intergenerational literacy program. Knowing this difference leads me to ask the question: what are the implications of intergenerational literacy situations if children are not regarded as "a more equal player" (Jessel et al., 2011, p. 39)? And how do children generate knowledge in those kind of literacy situations?

Implications of the above include concerns for more research into how context affects generational status. This call for research in this area extends to the need for cross-cultural analyses, given the highly situational nature of intergenerational knowledge construction. Further, questions remain such as what different knowledge might be generated when intergenerational interactions take place in different contexts and with different participants? Investigating this might contribute to understanding of how children and elders syncretize knowledge and link up with cultural and historical knowledge, providing new insights into the nature of knowledge and knowledge production across and among generations.

5.3 Intergenerational literacy and schools

Findings outlined in Chapter Four suggest that elders played an important part in connecting schools and children's home or community. Linking this finding to what I illustrated in Chapter Two, scholars working in literacy pedagogy (e.g., Riojas-Cortez, 2001) suggest schools use a funds of knowledge approach to promote children's literacy learning. The findings suggest that when elders entered schools to engage in literacies, schools were provided access to new knowledge of children's literacy practices within their families and could learn more about children's and community's funds of knowledge.

Scholars in my findings suggested, overall, that schools and teachers should engage older adults in school systems and children's literacy practices in schools. Their claims were based on the documented benefits of intergenerational literacy, such as the positive impacts on children's literacy knowledge, literacy and identity options, and others (see section 4.2.4). These benefits suggest that intergenerational literacy is significant and meaningful, and of need, for young children, elders and schools.

Consequently, my study recommends that future research might need to go further to look into the responsibilities of schools and what can schools do when intergenerational literacy was identified as so much important and beneficial to children's meaning making. Questions for investigation here include: how can grandparents and other elders in school literacy learning be engaged so as to transform school culture? What do elders do/can do in/with schools? And what are the roles of teachers (as the important person identified in the research who can help children to link their formal and informal learning) when grandparents are involved in schools? The study

also calls for stronger and more meaningful research that could facilitate the implementation of intergenerational literacy in schools.

5.4 The situated nature of intergenerational literacy

As mentioned, it was shown in my findings that reviewed studies emphasized the social nature of literacy. Reviewed publications in my study expressed more specifically the social nature of intergenerational literacy practices between grandchildren and grandparents, underpinning the conceptualization of literacy as social practice. The findings show that children acquire literacy knowledge when they interact socially with their grandparents or other elders (e.g., shared reading, art class and computer games), in formal (e.g., intergenerational literacy programs) and informal intergenerational learning (e.g., home-related activity, play), and in both private and public contexts (e.g., home, senior's centre, classroom).

Also, as I illustrated in Chapter Two that literature recognized the social nature of literacy as both visible activities (Barton & Hamilton, 2000) and invisible *stuffs*, such as “social and interpersonal relationship and emotions/affect” (Heydon & Du, 2019, p. 220), and/or “values, attitudes, feelings and social relationships” (Street, 1993, p. 12) in the doing of literacy. In intergenerational literacy, a special relationship is established between skipped generations. Elders were found, for example, to derive a feeling of self-valued, and children were able to learn in safe, friendly, and joyful circumstances (Freeman & King, 2001; Jessel et al., 2004; Jessel et al., 2011; Kenner et al., 2007). All of those invisible values, social relationships, feelings, and attitudes are embedded in socially constructed intergenerational encounters in my reviewed studies.

Additionally, as findings showed, non-humans, such as materials were mentioned. When children use the materials with their meaning making, they pick materials that are available for them (Heydon & Du, 2019). Heydon and Du (2019) explained that some materials, like literacy tools, “in one place does not necessarily mean the same in another” (p.221). Those materials are regarded as *placed resources* (Prinsloo, 2005). That is, specific materials and modes function contextually, rather than inherently (Heydon & Du, 2019). In my reviewed studies, grandmothers and grandchildren’s touch and the use of computers in Jessel (2011) and Kenner (2007) and their colleagues’ cases are both placed resources in their own intergenerational interactions. This helps us get a better understanding of the situated nature of intergenerational literacy.

Here, the implications relate to the function of social domains or spaces and the involvement of humans and non-humans in situated intergenerational literacy practices. I turn now to more on the question of non-human involvement in intergenerational literacy.

5.5 Non-humans in intergenerational literacy

As just mentioned, my study found the suggestion of non-humans implicated in intergenerational literacy. Sometimes these entities were just regarded as the resources or materials that were utilized by participants in each study, though there was suggestion of how the benefits of intergenerational literacy were co-created through human and non-human entanglements.

Clearly, the literacy education literature is growing in awareness that literacies are socio-material endeavours (Dahlberg & Moss, 2010; Kuby & Crawford, 2018; Kuby & Rowsell, 2017; Leander & Boldt, 2013). In new material intergenerational learning, humans are not only the participants who contributed to knowledge construction and relationship building and so forth. It is important to acknowledge that “Children are always thinking with materials” and we can no longer see the

young children within literacy as “separate individuals, but as already entangled with each other and materials” (Kuby et al., 2018, p. 70). Reviewed papers in my study saw materials as what participants brought in their learning activities, though had not addressed children’s “thinking with materials” (p. 70) yet.

Another finding in my study indicated that intergenerational relationships were built in/through intergenerational interactions that were characterized as secure, joyful, relaxing and so forth, inducing children to be more willing to speak their ideas. Take-aways are that relationships are situated and involve the material and immaterial. Some *stuffs* might be invisible in the relationships or contexts but have the potential to influence intergenerational literacy. Those *stuffs* might also include non-humans and more-than-humans entities, such as *time* (as found in my study).

Therefore, I recommend that future research on intergenerational literacy pay increased attention to non-human entities potentially involved in intergenerational literacy. Questions here include: What materials are included in intergenerational literacy? More generally, in what ways do non-human entities participated in intergenerational literacy? The cases in the studies of Jessel et al. (2011) and Kenner et al. (2007) provide clues to explore the material in children’s intergenerational literacy learning.

5.6 Diversity of research contexts and participants in intergenerational literacy

Chapter Four details how my study found the following trends in the literature: there was relative diversity of countries in which published intergenerational research has taken place; research

includes both private and public contexts, but public contexts focuses on schools and school-liked places; there was some diversity in research participants in terms of their linguistic, cultural and ethnic backgrounds, gender, and so forth; there were a variety of aspects and topics of intergenerational literacy investigated; and there was no obvious increase in publication quantities observed.

Drawing upon these trends, I suggest that intergenerational literacy studies should extend the countries it investigates. The findings show five countries are covered in the 18 reviewed intergenerational literacy studies, which is still a small portion of over 200 countries in our world. Also, the majority of the 18 reviewed papers in this study examined the intergenerational interactions that took place in anglophone countries, such as the United Kingdom, United States, and Canada. My study assumes that there might be some intergenerational literacy studies published in non-anglophone countries with other languages, instead of English; For example, in mainland China, some studies, published in Chinese, investigated the relationships between grandparents and grandchildren who both lived in under-developed areas (their hometown where grandchildren were born) and the adults (children's parents) of the family worked in another city, usually metropolis, for making money to better support the whole family (e.g., Lu, 2017). And there are some other studies concerning the intergenerational learning between the grandparents and grandchildren were published in Chinese language (e.g., Pei et al.,2005). If this is the case, research that was conducted in non-English languages might be invisible for researchers of various backgrounds. Therefore, my study wonders if there are any intergenerational literacy studies published in non-anglophone countries and hence calls for scholars' efforts on making those relevant studies visible, such as translating them into English, or publishing them in English.

Reviewed studies included both public and private contexts as research sites, though public sites emphasized schools and school-liked places. Future research might broaden its contextual scope to include more diverse social domains, both on public and private, such as libraries, churches, parks, and so forth. The more social and cultural contexts are involved in the research, the better scholars and educators may know about how various social contexts shape intergenerational literacy.

Regarding the participants, future research needs to involve more diversity in terms of participants' linguistic, cultural, and social backgrounds. Moreover, additional research should include children with disabilities. Findings in Chapter Four revealed that only a tiny number of papers discussed the intergenerational literacy learning of children with disabilities, and none included children with disabilities as the focus of the research.

5.7 Significance of the study

As mentioned in Chapter Three, systematic literature review intends “to integrate what others have done and said...to build bridges between related topic area, to identify the central issues in a field” (Cooper, 1998, p. 3). My systematic review study collected and synthesized the data about the knowledge of intergenerational literacy published in the past 20 years. This review offers other literacy researchers with an overview of the research trends and the existing knowledge about the intergenerational literacy studies.

Also, by thematically analysing all reviewed papers, my study identified several research gaps that future research needs to investigate. This identification provides researchers with an

orientation of what the significant and urgent issues are that need to be addressed in future intergenerational literacy research.

This systematic review might also contribute to the existing understanding of intergenerational literacy. All of this knowledge of intergenerational literacy might also assist literacy teachers, educators, and school administration to tackle the issues related to intergenerational relationships and help policy planners and policy makers to make relevant decisions.

5.8 Conclusion

In this chapter, I briefly summarized the findings that related to each topic I discussed in the above sections. Specifically, I discussed how grandparents and other elders support young children's literacy, the generational status of young children and older participants and the knowledge that is generated in intergenerational learning, and the schools' responsibility in children's intergenerational learning. Moreover, I discussed non-human entities in intergenerational literacy, the social nature of intergenerational literacy, and lastly, connecting to my first research question, I discussed the findings related to the research trend of all reviewed studies.

Equally importantly, I offered my recommendations for future research needs of intergenerational literacy. I suggested that future research might 1) pay attention to the nature of the knowledge that is generated in intergenerational literacy, 2) work on how to better facilitate schools and educators to take their responsibilities in intergenerational literacy, 3) explore the functions and nature of the non-human entities in intergenerational literacy, such as what they are and how they work, and 4) in general, extend the diversity of research countries, social

contexts, and participants. Overall, future research should be oriented to exploration on the situated nature of intergenerational literacy and its social-material constituents.

Finally, I illustrated the significance of my study, expressing its potential to contribute to an understanding of intergenerational literacy through its consolidation and synthesis of extant intergenerational literacy literature and suggestions for future knowledge generation.

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Appendices

Appendix A. Deductive and Inductive Thematic Synthesis

Deductive analysis

Themes	Study ID	Original data (Direct quotes)
The role(s) of the elders		
<ul style="list-style-type: none"> The Caring and Supportive Elders 	2	<p>“Our research showed that these volunteers make significant contributions to students’ literacy and social well-being, while engaging in meaningful work within their communities (Doiron & Lees, 2005).” (Doiron & Lees, 2009, p. 138)</p> <p>“Almost equally important, it seemed, was the volunteers’ ability to create a comfortable out-of-classroom environment, enhance students’ self-esteem by their praise and attentive listening, and give good readers a chance to show their skill.” (Doiron & Lees, 2009, p. 141)</p>
	15	<p>“her own hardships made her determined to help with her grandchildren’s education.” (Little, 2017, p. 431)</p>
	18	<p>“The grandmothers also spoke about the role race played in these troubling systems and felt that their race and that of their children compounded the challenges they encountered. ... Such advocacy was done in the form of meetings where the grandmothers met face-to-face with administrative staff, or instant communication through electronic means such as e-mail.” (Stephens, 2019, p. 435-436)</p> <p>“Learning advocacy for the betterment of their education is one of the many caretaking duties that are provided by the grandmothers.” (Stephens, 2019, p. 436)</p>
	16	<p>“provide an extra measure of security” ----- grandparents can “widen the womb of the family and increase geometrically the children’s life support system. ... they are nurses and feeders, fixers and providers, caretakers and playmates” (Kornhaber & Woodward, 1981, p. 177) ----- (Ken & McCluskey, 2000, p. 112)</p>
	2	<p>“Teachers too commented on the value of having volunteers who provided an outlet for children to share their ideas and feelings.” (Doiron & Lees, 2009, p. 142)</p>
	15	<p>“I want to encourage my grandchild to, you know, to a better life and give my children a better life as well [...]” (Little, 2017, p. 432)</p>
	5	<p>“Jamie’s interest in technology and popular culture is encouraged by his mother and grandmother, who buy him videos, and computer games.”</p> <p>“His grandmother sits with him while he watches videos allowing favourite sequences to be replayed, singing along and talking back to the screen, supporting Jamie and Peter’s attempts to re-enact the story alongside the screen, suggesting props they could use, laughing at their antics.”</p>

		(Gregory et al., 2004, p. 71)
	10	“we found that most grandparents listen attentively to what their grandchildren have to say. In turn this active listening encourages the children to verbalise their ideas.” (Jane & Robbins, 2007, p. 15)
	17	“Although limited, the above literature has demonstrated that grandparents provide a range of practical and emotional support for families with disabled children.” (Mitchell, 2008, p. 128)
	17	“Grandparents can be potential volunteers/helpers in schools:” (Mitchell, 2008, p. 130)
• Learning resources	1	“We argue that elders are an untapped source of knowledge that preschools and schools can call on to legitimize and bring to the forefront.” (Anderson et al., 2017, p. 20)
	14	“Grandparents are likely to be important resources for the ‘funds of knowledge’ held within communities, defined as ‘historically accumulated and culturally developed bodies of knowledge and skills essential for household or individual functioning and well-being’ (Moll et al., 1992: 133).” (Kenner et al., 2007, p. 222)
	17	“available research demonstrates that grandparents can be both a potential source of support and a stressor for parents.” (Mitchell, 2008, p. 128)
	11	“Sahil is also acknowledging Razia as the Bengali cultural and linguistic resource for the family.” (Jessel et al., 2004, p.5)
	16	“instill a sense of family history, continuity, and purpose” --- “grandparents ... preserved their ethnic heritage” (Ken & McCluskey, 2000, p. 112)
	14	“Grandparents had a sense of maintaining continuity for a new generation by passing on their experience of family history” “The Bangladeshi grandparents were a key resource for developing children’s knowledge of Bengali, thus retaining a connection with heritage and culture.” (Kenner et al., 2007, p. 238)
Relationships building		
	9	“Results indicate that singing provided opportunities for participants to form relationships and make meaning as a group while combining modes” (Heydon et al., 2017, p. 128)
	13	“they ... realized that across a distance of 60 years they had things in common” “it was through the mutual story-telling that stereotypes were overcome and connections made” (Kazemek et al., 2002, p. 622)
	3	“they enjoyed the time together as much as the young children did” (Freeman & King, 2001, p. 214)
	3	“This project included many opportunities for meaningful social interactions as Book Buddies ate lunch and read together.” (Freeman & King, 2001, p. 216)
	17	“there is learning in a fun and relaxed manner whilst also developing/building on a ‘special relationship’: ‘It was fun learning with grandma because we do everything together’ (Gyllenspetz, 2007, p. 26).” (Mitchell, 2008, p. 130)

11	“Additionally, we have noted the importance of a caring relationship for learning and development in that it allows risk taking and experimentation. The mutual trust together with a sharing of purpose and activities can be seen to contribute to the social dynamics.” (Jessel et al., 2004, p.9)
16	“through active involvement with grandchildren, grandparents tie the past to the present and provide intergenerational connectedness and permanence (Bengtson & Robertson, 1985; Kornhaber & Woodward, 1981; Rice, 1998)” (Ken & McCluskey, 2000, p. 112)
16	“establish enduring relationships” (Ken & McCluskey, 2000, p. 113)
14	“The older and younger generations provided for each other’s needs, thus establishing a relationship that we have characterized as one of ‘mutuality’.” (Kenner et al., 2007, p. 226-227) “Grandparents described the enjoyment they gained from interacting with grandchildren.” “Whilst mutual enjoyment of the relationship was mentioned by grandparents from all cultural backgrounds” (Kenner et al., 2007, p. 227)
11	“All this takes place in a setting where a comfortable relationship seems to exist between them. ... there is a very noticeable, overriding sense of a friendly, relaxed and caring relationship” (Jessel et al., 2004, p.8)
14	“their interaction had a different quality from the parent–child relationship. ... children ‘get a sense of security and comfort from us [=grandparents]’” (Kenner et al., 2007, p. 227)
12	“Security and comfort: ... grandparents conveyed a sense of enjoyment and well-being from interacting with their grandchildren.” (Jessel et al., 2010, p. 41) “Coupled with this was a sense of a mutual vulnerability detected in the grandparent–grandchild relationships. ... this acknowledged sense of security and comfort, mutual vulnerability and playfulness appeared pervasive and characterised the intergenerational relationships that we studied.” (Jessel et al., 2010, p. 42)
12	“The intergenerational relationships formed were mutually supportive and could be seen to complement those between other adults such as parents and teachers.” (Jessel et al., 2010, p. 47)
17	“intergenerational learning provides an important mechanism to extend school/home links and draw home learning into the classroom.” (Mitchell, 2008)
18	“this form of engagement offers the grandmothers the opportunity to become familiar with the educational processes involving their grandchildren and the policies affecting the schools in their community.” (Stephens, 2019, p. 436) “PTA and other civic engagements have become a way of life for some of the grandmothers. By partaking in such initiatives, these grandmothers can learn for their development and to pass the

	learning on to their grandchildren in their care.” (Stephens, 2019, p. 437)
2	“we also recognized that senior volunteers were extending the school culture back out into the community.” (Doiron & Lees, 2009, p. 152)
2	“their insights and experiences become part of the community’s daily, ordinary exchange of news, giving literacy and schooling a new human face and fresh relevance.” (Doiron & Lees, 2009, p. 145)
Knowledge construction	
11	“Razia has learned English from family interactions and the current exchanges with the grandchildren provide further opportunity for this” (Jessel et al., 2004, p.5)
14	“When children and grandparents learn together, the relationship may offer particular scope for ‘transformation’ of ideas and for ‘syncretizing’ cultural information.” (Kenner et al., 2007, p. 222)
9	“As a literacy practice, singing provided opportunities for participants to learn from and with one another as they shared their funds of knowledge.” (Heydon et al., 2017, p.134) “...the mutuality in meaning making between elders and children as they each contributed the resources they had to form the ensembles.” (Heydon et al., 2017, p.135)
8	“... all generations can complement each other’s knowledge, strengths, and areas fo need” (Heydon & Daly, 2008, p. 84)
17	“reciprocal learning was also demonstrated, with grandchildren teaching grandparents new skills, such as IT skills.” (Mitchell, 2008, p. 130)
11	“Thus, the learning is also a two-way process: Razia increases Sahil’s knowledge about Bengali literacy while refining her understanding of computer literacy and, through Sahil’s involvement with the computer and with his sisters, she also improves her grasp of English.” (Jessel et al., 2004, p.8)
12	“Examples conveying a sense of reciprocity in learning were obtained from the interview and video data” (Jessel et al., 2010, p. 43)
14	“Grandparents treated children as competent co-constructors of the event, giving them plenty of time to act and only offering guidance Meanwhile, children also provided support for adult learning, particularly when using the computer together. They expressed mutual care and sensitivity for their grandparents as learners.” (Kenner et al., 2007, p. 239)
18	“Through faith literacy development, they were also able to contribute to their grandchild’s moral development.” (Stephens, 2019, p. 438)
9	“Results indicated that singing provided opportunities for participants to form relationships and create and share meanings as a group while combining different modes and media.” (Heydon et al., 2017, p.131)

		“singing linked elders and children in the practice of textual production and in the text itself.” (Heydon et al., 2017, p.132)
14		“The older and younger generations used their different capabilities to create shared understandings, leading to new forms of linguistic and cultural learning.” (Kenner et al., 2007, p. 237)
5		“...use this information to inform his own storying as he borrows from his store of knowledge and creates new meanings through his play.” (Gregory et al., 2004, p. 73)
14		“The intergenerational knowledge exchange observed in our case studies complemented children’s school learning and contributed to lifelong learning for grandparents.” (Kenner et al., 2007, p. 235)
14		“The overall learning relationship is a balanced one in which both partners remain actively involved.” (Kenner et al., 2007, p. 233)
Impact of Intergenerational literacy learning		
16		“grandparent-grandchild interactions have a powerful impact not only on the grandchildren but also on the parents and the grandparents themselves.” (Ken & McCluskey, 2000, p. 112)
2		“All of our participants (teachers, volunteers, and students) agreed that a project in which seniors read with children in one-to-one, weekly sessions is a positive and worthwhile initiative. It has clear benefits in promoting and supporting students’ literacy growth, plus it provides a nurturing and enjoyable social benefit when students share their ideas and feelings with a caring elder.” (Doiron & Lees, 2009, p. 149)
8		“IG programming creates a means for meaningful and relevant experiences and interactions between participants, ...” (Heydon & Daly, 2008, p. 81)
Impacts for children		
2		“These results point to the positive impact the shared reading experiences have on students’ enjoyment of reading, practice of their reading skills, and growth in understanding of the value of reading.” (Doiron & Lees, 2009, p. 139)
5		“listens to everything and everything is a story for him.” (Gregory et al., 2004, p. 70)
3		“This hands-on project enhanced preschool children’s cognitive, social, emotional, and physical development” (Freeman & King, 2001, p. 215)
1		“the children were also learning through participation in the discussion.” (Anderson et al., 2017, p. 26)
9		“the singing in the programme suggested how singing could link generations and expand literacy options for participants.” (Heydon et al., 2017, p. 133)

5	“It also gave children an opportunity to extend their knowledge of literacy and explore functions in everyday life giving them a greater understanding of it uses.” (Gregory et al., 2004, p. 75)
8	“... capitalizes on participants’ funds of knowledge.” “the activity invites participants to explore their own experience and identities in ways that help them make connections with each other” (Heydon & Daly, 2008, p. 83)
4	“Most children at Beitsefer developed teaching strategies that attested to a transformation of identity and confidence in their capability as teachers. By repeating explanations, adjusting the pace of teaching to the seniors’ absorptive ability and consistently refraining from touching the mouse, they signaled their assimilation of the teacher’s role and embodied the empathy that one needs to carry it out successfully.” (Gamliel & Hazan, 2014, p. 898)
14	“They gain knowledge of each relative’s place in the complex kinship network and where they themselves fit in, giving them a sense of their own identity.” (Kenner et al., 2007, p. 225)
8	“children see themselves as competent and appreciated because of their knowledge and skills” (Heydon & Daly, 2008, p. 85)
7	“Our work suggests that close observation plays an important role in learning more generally and especially in situations where older children are being ‘taught’ by the grandparent generation.” “Through close observation, young children are given the tools to enable them to ‘practise what they already know’ (Cole 1985: 157), a way of ‘knowing’ developed subconsciously yet probably over many hours of ‘work’.” (Gregory et al., 2010, p. 171)
15	“the families’ heritage languages are disappearing gradually.” (Little, 2017, p. 432) “Nevertheless, the families interviewed focused their reading efforts almost exclusively on English.” (Little, 2017, p. 433) “the increased availability of English resources and focus on success within the English system have resulted in the marginalisation of the heritage language in family reading, but with a desire to maintain the heritage language orally.” (Little, 2017, p. 435)
2	“children’s relationships with elders strengthen social capital : the tangible and intangible resources – norms, networks, values, and trust – to which community members have access.” (Doiron & Lees, 2009, p. 146)
14	“The questionnaire responses emphasized the importance of these wider aspects of learning, underpinning children’s understanding of social relationships.” (Kenner et al., 2007, p. 225)
10	“We found that the children in the study are developing rich, everyday concepts and creative thinking through their

	participation in shared, informal activities with their grandparents.” (Jane & Robbins, 2007, p. 8)
Impacts for elders	
2	<p>“interaction with other people, especially children, making me more aware of trends and issues in education today.”</p> <p>““working with Project L.O.V.E. has helped me realize what a difficult job teachers have in the classroom today”</p> <p>“my eyes were opened to the many needs of young students and the tasks the teachers have to deal with, the many problems, both academic and social.”</p> <p>(Doiron & Lees, 2009, p. 145)</p>
10	<p>“a form of relaxation and enjoyment for grandparents, and reinforces feelings of ‘being wanted’. In addition, by engaging in joint everyday experiences, the grandparents’ values become valued by the grandchild.” (Jane & Robbins, 2007, p. 12)</p>
16	<p>“give new meaning to our (elders) lives”</p> <p>“make us laugh”; “keep us young”; “cause us to be more future oriented”</p> <p>(Ken & McCluskey, 2000, p. 114)</p>
2	<p>“a feeling of contributing to the community in which we live, a giving back for what we have obtained, having a small part in helping children feel better about themselves, keeping in touch with the younger generation.” (Doiron & Lees, 2009, p. 146)</p>

Inductive analysis

Themes	Study ID	Original data (direct quotes)
Literacy outreach	2	“our understanding of literacy is expanded beyond its traditional view as an individual attribute made up of a discreet set of linguistic skills towards a broader and more holistic perspective where the focus is on the social contexts in which literacy practices take place.” (Doiron & Lees, 2009, p. 148)
	8	“the activity’s technical aspects reflect the social nature of learning. Participants assist each other” (Heydon & Daly, 2008, p. 83)
	10	“This valuing of intergenerational activities exemplifies what Hedegaard (1998) wrote about the situated nature of learning and cognition, and the support that is given for culturally relevant activities.” (Jane & Robbins, 2007, p. 12)
	10	“cultural-historical nature of children’s everyday thinking and activities” (Jane & Robbins, 2007, p. 13)
	9	“how the participants’ literacy practices were impacted by their culturally shaped histories and identities (Pahl, 2007).” (Heydon et al., 2017, p. 134)
	9	“Study findings foreground the communicative power of singing and suggest how singing, when viewed through a multimodal lens, might be a potent tool for multimodal literacy learning.” (Heydon et al., 2017, p.)
Intergenerational Literacy in Pedagogy	14	“Our findings extend theories of sociocultural learning by highlighting the unique learning relationship of grandparents and grandchildren, to which each generation brings particular knowledge and skills.” (Kenner et al., 2007, p. 239)
	18	“It is important for schools to recognize the roles of primary caregiving grandmothers including, advocate, teacher, and parent for continued support.” (Stephens, 2019, p. 440)
	14	“The study suggests that schools need to be aware of the special relationship between children and grandparents and how this contributes to learning at home. Teachers can build links with grandparents by inviting them into school to share their knowledge and experience” (Kenner et al., 2007, p. 240)
	10	“it is important for teachers to be aware that strong interpersonal relationships exist for children, and that shared understandings develop with significant others in their lives, especially grandparents.” (Jane & Robbins, 2007, p. 16)
	2	“it’s important for school leaders to: (1) focus on making the volunteers feel part of the school culture; (2) provide adequate in-house structure/organization for the operation of the program; and (3) build in mechanisms for teacher-volunteer communication.” (Doiron & Lees, 2009, p. 149)

	10	<p>“teachers have an important role to play in helping children to overcome the gap between thinking within and outside school context”</p> <p>(Jane & Robbins, 2007, p. 16)</p>
Non-humans in intergenerational learning	15	<p>“In all four families, the grandmothers took their children to the library. For all families, the library served multiple purposes, providing not only access to books, but also ‘a place to go’, ...”</p> <p>(Little, 2017, p. 433)</p> <p>“For the other families, the library still forms a regular part of their lives” (Little, 2017, p. 434)</p>
	12	<p>“The spaces within which the intergenerational encounters occurred have been marked out in different ways; although they are invariably physically located they are subject to other dynamics that relate to activity, social context and cultural context.” (Jessel et al., p. 48)</p>
	11	<p>“touch appears to act as a communicative device that forms part of the continued social interaction between grandmother and grandchild. Razia uses touch to encourage Sahil as he talks, Sahil uses touch to acknowledge her support and their relationship.”</p> <p>“Touch has been used by Razia to build Sahil’s security and self-confidence, to motivate and to guide his kinesthetic learning.”</p> <p>(Jessel et al., 2004, p.8)</p>
	14	<p>“our video data highlighted the role of touch as a particularly significant means of communication, used by grandparents and grandchildren to build a secure and confident relationship and to negotiate kinaesthetic learning.</p> <p>We identified the following purposes for which touch was used:</p> <ul style="list-style-type: none"> • confirming the grandparent/child relationship • constructing the event • guiding • shadowing • enabling • disciplining.” <p>(Kenner et al., 2007, p. 233)</p>
	12	<p>“These (Touch) in turn form a pattern of interactions that helped to maintain concentration on the learning activity as well as confirming the grandparent–grandchild relationship.” (Jessel et al., 2010, p. 42)</p>
	12	<p>“What is brought into a space can include knowledge and expertise as well as a range of material resources. We have found that the computer can colour the space by becoming a ‘third participant’ in the learning interaction by setting the rhythm of events and evoking ‘talkback’ to the screen (Kenner et al., 2005).</p> <p>Resources can become mediating artefacts (Crook, 2001) and part of the discursive space as exemplified through technologies such as the computer.” (Jessel et al., 2010, p.48)</p>

10	“grandparents more frequently had the time to engage in unhurried activity with their grandchildren.” (Jane & Robbins, 2007, p. 14)
11	“Razia is able to spend time doing things with Sahil and with his two younger sisters. She has been able to give continued and extended support and has been flexible and willing to engage in a range of activities much of the time on a one-to-one basis.” (Jessel et al., 2004, p.8)
12	“The time that grandparents have to attend to children and their interests allows for a relationship that is caring and relaxed.” (Jessel et al., 2010, p.47)

Appendix B. Reference List of All Reviewed Papers

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10. Jane, B., & Robbins, J. (2007). Intergenerational learning: grandparents teaching everyday concepts in science and technology 1. *Asia - Pacific Forum on Science Learning and Teaching*, 8(1), 1-18. <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/1955897205?accountid=15115>
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Curriculum Vitae

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